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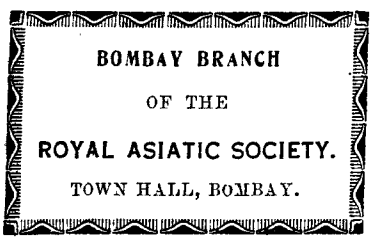

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Ever yours
James Paget.

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MEMOIRS AND LETTERS

OF

SIR JAMES PAGET

EDITED BY STEPHEN PAGET

ONE OF HIS SONS

WITH PORTRAITS AND OTHER ILLUSTRATIONS

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MEMOIRS AND LETTERS

OF

SIR JAMES PAGET

PREFACE

THESE Memoirs were written by Sir James Paget in the years 1880–1885. They tell chiefly of his early life: six chapters are given to the years 1814–1851, and only one to the years after them. It seemed best, therefore, to divide this book into two parts. The first part contains the whole of the Memoirs, with a commentary on each of the six chapters that are concerned with his early life. The second part gives an account of his later life; and is thus a sort of commentary on the last chapter of the Memoirs. This arrangement involved some repetition of facts; but it is hard to see what else could have been done without breaking-up the text of the Memoirs.

His work in pathology, and his private practice, have been put in outline only: there are many things in medicine and surgery that are not to be treated without reserve. The preponderance of letters to his brother, and of home-letters, if it be a fault, is one that could hardly have been avoided: for, except these, very few of his letters have been kept; and he did not keep letters.

Among those who have generously given help, and have corrected many faults, are his son the Bishop of Oxford, his nephew Mr. G. E. Paget, and his friend Sir Thomas Smith. Other friends have contributed accounts of him as they best knew him. But, for all the good help that has been given, the book is not worthy of his memory.

September, 1901.

Happily, the faults that remain uncorrected do not touch his work; and the book has found favour among those for whose sake chiefly he wrote his Memoirs, the men of his own profession.

October, 1901.

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MEMOIRS AND LETTERS

OF

SIR JAMES PAGET

PART I. (1814–1851.)

I

CHILDHOOD AND BOYHOOD, YARMOUTH, 1814–1830.

I HAVE only the most vague and useless recollections of events in my childhood. I remember the roasting of a whole ox in the market-place when George IV. was crowned, and the throwing of pieces of the half-cooked beef among the crowd: and a procession to my father's house in 1817, when he was Mayor, and the Aldermen in crimson damask-silk gowns came with music to a 'whet': and I remember some private theatricals at which, between the pieces, I sang a hunting song—being then between five and six, and deemed rather a prodigy in singing. I vaguely remember the events of nursery life—my old nurse, and some of the other servants—but nothing useful to others or myself.

My father, Samuel Paget, who was born in 1774, was a rather small, active, handsome man; and I remember him in my boyhood as a good

cricketer, a good speaker, gentle, calm, busy all day, and always seeming to love more than anything the quiet of his home. He was then a prosperous man, rich, very busy as a brewer and large ship-owner, and a man of influence in the town; in which he had lately, at great cost, built and furnished a very handsome house. He had risen to his good position by his own power and character. His father, I have heard, was an idle and rather dissolute man, from whom he derived no money or help in either teaching or example; his mother was prudent, gentle, affectionate, helpful even in the business of his early life.

My father's school-education, I think, did not extend beyond the teaching of reading, writing, and some little arithmetic; but in these he became by self-education faultless—certainly, within the range of his business and of home affairs, one of the best letter-writers I have ever known. After leaving school, he became clerk to a Mr. Kerridge, a merchant of some kind in the town. When he was 17, his master, who held a contract for the supply of provisions to the North Sea fleet when they came into Yarmouth Roads, died suddenly. Here was an opportunity. At that time, lads of 17 were much nearer to full mental manhood than they are now: but even then it must have needed rare resolution for any lad to do as, I have heard, my father did. He started at once for London. The journey was then nearly twenty-four hours long, and he had never seen the huge place—as huge then in comparison with Yarmouth as it is now: seeming as boundless, as crowded and con-

fusing. I have heard him say that when, on the first morning, he went into the Strand, he thought that the crowd he met must be coming from some great sight or public meeting; and he stood aside at a shop-door, that the people might pass and he be able to go on quietly. But the crowd continued, and he took courage and made his way to the Admiralty, and there showed such complete knowledge of his master's business, and pointed out so plainly the trouble that might arise from shifting the contract into others' hands, that he was allowed to hold it. He had to borrow money to begin with; and his mother went about, borrowing for him wherever she could; and they succeeded, in spite of opposition on political grounds and on account of his father's repute as being concerned in smuggling. And he fulfilled the contract so well that others of the like kind were given to him; and thus, though he was what we should now be ready to call a boy, he soon became one of the chief men of business in the town.

I heard it often told—not by himself—how Lord Duncan praised him after the battle of Camperdown. The fleet, or some part of it, had been in Yarmouth Roads; and, when they sailed just before the fight, needed their supplies in some extremely short time. They were supplied completely and as swiftly as they needed: and when, after the victory, the chief people of the town gave Lord Duncan a great dinner and drank his health, he, as I have heard, pointed to my father and said, 'That's the man that won the battle.' His merit is commemorated by a gold medal, which

was given to him, I believe, by Lord Duncan, and is marked *Earl St. Vincent's Testimony of Approbation.*

The battle of Camperdown was fought on October 11, 1797. The following account was written in the family-chronicles, many years ago, by Sir George Paget, Sir James's elder brother:—

The fleet was in Yarmouth Roads, when a merchant vessel, the *Gladden*, sailed in, signalling on all sides that the Dutch fleet had come out of port. Admiral de Winter was in command of it, and Lord Duncan of the English fleet with Onslow Vice-Admiral. The part my father filled was supplying the English fleet with fresh water within four and twenty hours after the intention of sailing was announced. By this expedition, the fleets met off the coast of Holland in little more than twenty-four hours, and the great victory of Camperdown was obtained. Singularly enough, amid so much bravery displayed on both sides, five Dutch captains and two English showed the white feather. Not so Onslow who directed the Yarmouth pilots, since he could not steer between two of the biggest of the enemy's ships, to steer into them—and he poured in a broadside on both sides. Lord Duncan brought de Winter prisoner into Yarmouth Roads, with the prizes and his own vessels alike severely enough handled. Two ships uninjured were observed to be moored apart from the rest—and when their officers appeared on shore they were cut by the rest of the fleet.

Late in life, and with more various business, my father became gradually less successful, and at last was very poor: but this was through no fault of his own, or at least not through any fault which could harm me. He became, perhaps, less active, more trustful; not less hopeful, but less self-reliant, less fit for the constantly increasing activity of competition in shipping and breweries. But, chiefly, he had a very large family and, as long as he could, he treated them very generously and educated them expensively.

I should give a very wrong impression of my father, if I were to speak of him only as a man of business. He was, in this, an admirable example; punctual, constant in work, perfectly fair, liberal and honest; even when he failed no one blamed him: but he was, besides, a thorough gentleman —cheerful, well-mannered, peace-loving, and hospitable; perfectly temperate, when frequent drunkenness was not deemed vile; refined in conversation even when cursing and nastiness were scarcely vulgar; and a lover of all that was simply beautiful in literature and art. Besides, he was a very active public-spirited man. He was the leader and lieutenant-colonel of a volunteer-corps raised at the time of the First Napoleon's threatened invasion; a busy member of the corporation, and of all the charitable institutions in the town.

I had his good counsel and example till he died, at 82, of that most rare of all the causes of death—mere old age. He had never once been ill, and in the time of his gradual decay nothing erred from its just proportion in the work of life; only there gradually became less of everything belonging to this life, and in due time everything slowly and coincidently ceased.

My mother was in some things very unlike him; and their marriage was a good example of that which seems a general rule—that the marriages are very happy in which those who are united are so far unlike that each may admire, in the other, qualities wanting in the self; and, with the pride of ownership, may enjoy to see those qualities admired by others. She was, at the time

of marriage, of better social position in the town; well-educated after the manner of the time, and very accomplished. Her father was, I think, a kind of self-elected fine gentleman; the son of a man of business, but, so far as I ever heard, never himself engaged in any; perhaps because he was very handsome, well-mannered, studious of propriety, and highly self-estimated. He married a rich widow by whom he had three daughters; and when she died, he lived, I believe, on the remains of her property, helped late in life by that of an old lady who lived with him and with his two younger daughters, then widowed and having small incomes of their own. I just remember him —a fine old man, grave, and dominant; for whom all his daughters had so profound respect that, although I never heard of his having said or done anything very wise, I never heard of their having wished for anything less or other than he did. And their respect for him did not diminish when he was dead: though he left them nothing, unless it were the gout, of which my inherited share has had great influence on my life.

That old Mr. Tolver was indeed 'studious of propriety, and highly self-estimated,' is plain from his letters—especially from one that he wrote to his daughter, just after her marriage:—

Chester, 16th *Decr*., 1799.—May every blessing that Heaven has in store for the deserving, and every good thing that fortune has to bestow, be your's, is the sincere wish of your dr. mother and myself. My dr. Girl certainly stole a March on us, but her reason is quite sufficient & I am well persuaded that no fair One stands a fairer chance of being happy—perfectly satisfied that you possess (his Noble conduct and his Letters bespeaking the Liberal Man, the Man of sence,

and the good Man) all the requisites in Mr. P. that make this Life an Earthly Paradise. With respect to my feelings, My Love, you have completely set 'em at rest, perfectly satisfied with your reasons that solely actuated you in not Inviting your dr. Sisters; & from this moment a thought Injurious to your sincerity shall never enter my Mind, but I am sure you will admit that trifles, where we sincerely Love, are apt to alarm us, and thus it was with your Poor father, who would sacrafize his Life for his Girls, dreading for a Moment to think of the least Slight amongst 'em. For myself, I don't think you'l ever see me in Yarmth. Here, thank God, your Father is respected as much as most, and if I possess my present Spot in peace, my Lot is even Enviable.

My mother was adopted, while a child, by an aunt, Mrs. Godfrey, whose husband was a rich man in Yarmouth: and by them she was most tenderly brought up, well educated and enriched. She was handsome, tall and graceful, somewhat hasty in temper, resolute, strong-willed, and strong in speech. But the qualities which one best remembers were her intense love of her children, her marvellous activity and industry, her admiration of all that was beautiful in art and nature, her skill in writing, needlework, and painting. She had seventeen children in twenty-six years: and nine of these, including the first and last born, grew-up to full age. She took the close charge and guidance of them all: she managed all household affairs and, after the manner of the time and place, did all the marketing and shopping, directed the cookery, and made the choicest sweets. She collected 'everything'—autographs, seals, and caricatures, shells, corals and agates, old china and glass, and 'curiosities' of all kinds—including all that she could induce the masters of my father's ships to bring home from their long voyages; and all her

collections were orderly arranged and labelled in her own fair hand. She wrote I know not how many scrap-books, and filled I know not how many albums with copies of verses and various sketches. Long after her marriage she studied oil-painting under Old Crome, who was for several years, while giving lessons in drawing at Yarmouth, a weekly visitor at the house; and she succeeded in imitating him so well that her pictures could certainly be sold as his. So, too, she copied the outlines by Fuseli, and the various designs by Stodart, and Corbould, and the other artists of the 'Annuals' style then prevalent. And then, as she grew old, her undiminished industry employed itself in needlework; and she was the best of knitters and the most constant, always loving the finest and most complex patterns and the longest tasks.

In the midst of all this she was active in the society of the town: hospitable, ready to do her share in all works of charity and public amusements; and more than her share in politics, as a thorough Tory with Mr. Pitt for her hero. Besides, she took part, even a leading and decisive part, in all grave business-questions; and she was the most motherly of women. Of all her various pursuits there was not one which she did not neglect or put aside when one of her children was ill or unhappy, or on the point of leaving home for any time or on his return from absence. Nor was any of us ever absent but we had letters regularly with home news and loving messages, and written in a handwriting so beautiful as it is now very rare to find.

When wealth diminished and gradually the luxuries of life were given up—the carriage and good horses, the more expensive of the servants, the wine and rather costly hospitality—she bore the change proudly and neither accepted nor expressed rebuke. But her health began to fail; and with the adversity in business there came domestic troubles, especially the long illness and the death of the son whom I think she loved the best of all; for he was very handsome, and in fair promise of success at the bar. She had paralysis, and with it the complete loss of speech. Thus she remained, slowly losing power, for at least two years. Yet she was never idle; she was always reading or writing or knitting—she still loved the enterprise of tasks in which she could excel, and achieved the knitting of a counterpane near six feet square, which contained various patterns, such as others used to knit in separate little squares and then unite, as in old 'patch-work'; but of which she resolved to knit the whole in one large piece. And she did it, though it needed many hours' daily work for many months, and sometimes large undoings and doings again that it might be, as it was at last, faultless.

And speechless as she was, shrunken, bent down and withered from her former graces, yet she was gentle and social and with simple gestures took part in family affairs, and helped to make the home still often happy.

Such were my parents. I can boast of being, in the best sense, well-born. The good qualities of the parents were transmitted variously to the

six brothers and two sisters among whom I grew up. There was the same regard for home in all: especially among those who remained there. Two of my brothers died soon after 30 of illnesses almost wholly due to the overwork and anxiety with which they strove, in vain, to maintain their father's failing business and to alleviate the burden of his poverty. My two sisters endured bravely the sadness of watching the brothers as they drifted slowly out of life; they looked on patiently at the constant failure of every attempt to regain the comfort of the times of wealth; they endured the sale of the pictures, books, and decorations of the old house, the retirement to a comparatively humble home. But in all this sadness there continued the same love of art and of collecting. One of the brothers was a thorough entomologist: a sister more than maintained the autographs and books of local history. Two were artists of rare skill; one of these, an admirable writer; he left manuscript memoirs of three of his brothers, written as commentaries on collections of their letters. They might have been published as romances of real life. And in all the family there was not one who did not show power and strong will for work; not one who was ever unfair, stupid, or dishonest.

My school-education was, to a certain point, the same as that of all my brothers, at one of the two chief boys' schools in the town. It was kept by Mr. Bowles, a careful, well-mannered, and generally well-informed man, who had been an

actor and now was minister of the Unitarian Chapel. I have an impression that the greater part of the private schools in small towns at that time were kept by persons who had failed in other callings in life, and who were generally deemed unfit for the public service or any more active business. Religious teaching was not commonly much thought of; if it was wished for, parents at home gave it: at least, they did who were as simply pious as mine were, though the teaching seldom went beyond the Church Catechism and the influence of good example. The education at Mr. Bowles's was not of a very high order; neither was it accurate or profound or of a kind likely to encourage deeper study. In the highest class it went as far as quadratic equations, the first six books of Euclid, and to undefined distances in Horace and Virgil, after Cæsar and Sallust; and in Homer, after Xenophon and a Greek Delectus. In all these there was little more to be done than oral translation and parsing in classes; there was but little attempt at composition or verse-writing, and very little of history, geography, or the use of the globes. Still, it seems to have been a very fair education for what it cost—eight guineas a year; and it was given punctually and carefully and with sufficient penalties for negligence. It would have served quite well enough for the making fit for any of the public schools; and did so serve for my eldest three brothers, who went to Charterhouse, at that time a costly school. But, by the time I was 13, my father had begun to lose money, and was obliged to limit the school-

teaching of the four younger sons to what Mr. Bowles could give.

I have no doubt that I thus suffered heavy loss. I learned as much as I could, and for the last year or more was the head boy in the school; and I did my best in after years to increase my 'school-learning'; but I never could acquire anything fairly to be called classical knowledge: I could translate enough for the commonplace understanding of a Latin or a Greek book, but never could acquire any classic taste or enjoy the influence of any ancient writer, or take part in any of the learned table-talk to which in later years I was admitted—unless it were that most popular of parts, the part of a listener who appeared intelligent. Equal, or perhaps greater, was the loss in the fitness or the facility for social life; but how great this was I cannot judge, or how far I showed the defects which I have so often heard attributed to those who have not enjoyed the advantages of public schools and universities.

Mr. Bowles had been the leading actor in a Norwich company that went every year to Yarmouth, Lynn, and Cambridge; he had played Macbeth to his wife's Lady Macbeth; she died, and he left the stage, and entered the ministry, and married again. The school was at 5 Queen Street, a little house in a street leading from the South Quay to Middlegate Street. The school-room was on the first floor; there was also a back room, under the staircase, where the smaller boys learned their lessons. The number of boys was from thirty to thirty-five; of whom eight or ten were boarders. The school hours were from 9 to 12, and from 2 to 5; with half-holidays on Saturdays, and sometimes on Mondays, when the boys were taken to walk to Gorleston, Caister, or Burgh Castle.

Near the close of my school life, my education was varied on account of a very silly wish of mine to go into the Navy. I cannot remember any better reason for my wish than my envy of the immense attention paid by the people, especially by the ladies, of the town to the smartly dressed officers who occasionally came on shore from small frigates and sloops in the roadstead. But the reason for my wish was as little discerned as it was confessed: the Navy was at least a profession for gentlemen; the education for it was very cheap and my father had friends in it. So my wish was encouraged, and I studied navigation, with more of mathematics and geometry than was usual in the school; and, when I was nearly 16, my father wrote to Captain Sir Eaton Travers, a brave officer and a very old friend, and asked him to take me in hand. I remember the writing of the letter, and that my father took it after dinner that he might himself leave it at Sir Eaton's door. But he had a habit, to which he often yielded, of saying after long discussion of any serious matter, *Let us sleep on it*: and so he said when he brought back the letter. The sleep did not come I believe till after long reconsideration of the whole subject, and many tears and earnest appeals from my mother that he would not let me leave home. These prevailed, and next morning the letter was burnt, and I cried for a few minutes and was miserable for a day or two. But I cannot imagine a happier escape; for I cannot think of a calling in life for which I should have been more utterly unfit than for His Majesty's Navy at that time.

COMMENTARY.

Yarmouth, a hundred years ago, held a very high place among English towns, by virtue of its incessant activity in commerce; it had an immense export-trade in corn and in cotton goods, and imported iron, pitch, and wood from Russia, Sweden, and Norway. 'Nearly the whole population of the town,' says Druery in 1826, 'are directly or indirectly engaged in mercantile concerns.' And, for the further honour and glory of its people, it stood over against the enemy; always quarrelling with the Hollanders, and watching for the downfall of Napoleon, or for his landing in England; and often seeing men who were making history. Nelson sailed from Yarmouth to the battle of Copenhagen, and returned to Yarmouth after the battle of the Nile; in 1807 came Louis XVIII., 'the first time since Poictiers that a king of France had been in England'; in 1810, Gustavus Adolphus IV., after his abdication; in 1813, the Prince of Orange. All these years, Yarmouth was never dull; there were French frigates brought into the roadstead, press-gangs in the streets, days of public humiliation or of thanksgiving, wild rumours of invasion; and over all the noise of fighting, and of trade, and of corrupt elections furiously contested, the sound of the sea—

December, 1807.—A hundred and forty-four dead bodies washed ashore in this vicinity after a heavy gale.

November, 1810.—The beach from Yarmouth to Wells covered with wrecks and dead bodies after a heavy gale.

The town has grown from 16,000 inhabitants a century ago to 50,000 now; and its fishing-trade has grown with it; but the spirit of that age has gone from Yarmouth. Still, it takes kindly to its new life as a 'seaside resort.' Vast flower-gardens, good open-air music, good air, and room enough for everybody except in August—all these it provides for Londoners, and has kept something of its old distinction, and the beauty of its church, and market-place, and quays.

The first mention in print of Samuel Paget, Sir James Paget's father, is in an account of Nelson's return to England after the battle of the Nile. Nelson came in the packet-boat from Cuxhaven, in November 1800, under

convoy of a man-of-war; and sent before him a letter to Mr. Turner, the rector of Yarmouth parish church:—

Dear Sir,—Sir William Hamilton, Lady Hamilton, and myself intend to attend Divine Service to-morrow in order to Return Thanks to the Deity for the many mercies vouchsafed unto them for several years past, and we request that our thanks may be expressed in the service of the Day, and I beg, Rev. Sir, to express myself your obliged servant,

BRONTË, NELSON OF THE NILE.

The crowd dragged his carriage to the Wrestlers Inn, the meeting-place of the Church and King Club; the Mayor and Corporation waited on him 'in their formalities,' and presented to him the freedom of the town; and, in the afternoon, 'the Mayor and Captain Paget, who command each of them a Volunteer corps, marched with their band to the space before the Inn, and fired three excellent volleys in honour of the noble Lord, who very politely came forward into a balcony, with Sir William and Lady Hamilton, to receive this testimony of respect.'

Samuel Paget and Sarah Elizabeth Tolver were married in December 1799. Between 1800 and 1813 eleven children were born to them, five of whom lived to grow up—Martha, Frederick, Arthur, George, and Charles. In 1812–1813, on the site of their old house on the South Quay, they built a fine new house; and in it, on January 11, 1814, their son James was born. Three months later—on April 19—Yarmouth celebrated in grand style *The Downfall of the French Tyrant and the Restoration of the Bourbons*. There was a procession—Neptune and his Tritons, Amphitrite with fifty damsels in white, the Corsican Ogre himself in effigy, with attendant Cossacks; and, to burn the effigy, a bonfire forty feet high, of a thousand faggots, a waggon-load of wood, old boats, tar-barrels, dummy heads full of gunpowder, and 'a vast number of other combustibles.' On the North Denes, pig-hunts, donkey-races, and ten barrels of ale; on the South Quay, a feast of eight thousand people, at fifty-eight tables—to every table, beef and plum pudding, beer and tobacco. Loyal toasts were drunk, at the gun-signal, all down the line of the feast—

May all Tyrants meet the fate of Bonaparte.
The Emperor Alexander, and the Allied Sovereigns.

Marquis Wellington, and all our brave Officers and Soldiers.
Prosperity to the Town of Yarmouth, and a good fishing.
The speedy Return of our Townsmen imprisoned in France.

The first of the fifty-eight tables was set opposite Samuel Paget's new house, and the line stretched nearly to Sir Edmund Lacon's house at the other end of the South Quay. Mrs. Paget writes to her husband's brother an account of it all :—

From our chimneys to the masts of the large ship lying opposite we had two lines of colours, worth from £150 to £200; each side the door, English ensigns and French, united with laurels, and in each lamp-post a Russian and Prussian ensign. The tricolour'd flag was laid on the steps, and many of the spectators walked up and down for the gratification of treading it under foot. I set-on the first dish—we roasted a rump of beef for the top, and sent it in with a silk Union Jack. We placed a small table at the head, for the accommodation of Mr. Mayor (who, by the bye, had less to do with it than any individual in the town), Rev. R. Turner, Mr. Borrett, and your brother—who was in higher spirits than I ever saw him. When the King's health was drunk, myself and all the children, and the servants, sat down at the head of the table, and each took a glass! It was highly diverting to see each man with his pipe—when the Mayor had smoked one he declared he felt himself so comfortable he would take a second. Never was a day of such harmony and unanimity witnessed—and it can scarcely be believed, but it is a positive fact, not one was seen in liquor. The bonfire was fierce enough at 5 in the morning to roast a bullock.

Next year came the news of Waterloo, and 600 wounded men were taken into the new Naval Hospital. Sir George Paget always remembered how he had seen from a window of the play-room the arrival of the coach along the Gorleston road, with flags flying, and the guard shouting out the victory.

Then, after Waterloo, Yarmouth settled down to trade. For the next nine or ten years Samuel Paget was at the height of his prosperity—ship-owner, banker, brewer, 'train-band captain,' and, in 1817, Mayor of the town. His three elder sons, who went to Charterhouse—Frederick, Arthur, and George—had Thackeray among

their friends there.[1] Charles, the fourth son, was kept back by a very long illness in his boyhood. He was the best artist in the family, and the best entomologist; and became one of the partners in the brewery. James was the fifth son; then came Frank, born in 1816, who also was a partner in 'Paget and Sons'; and Alfred, born in 1818. The two sisters, Martha and Kate, were the eldest and the youngest of the children.

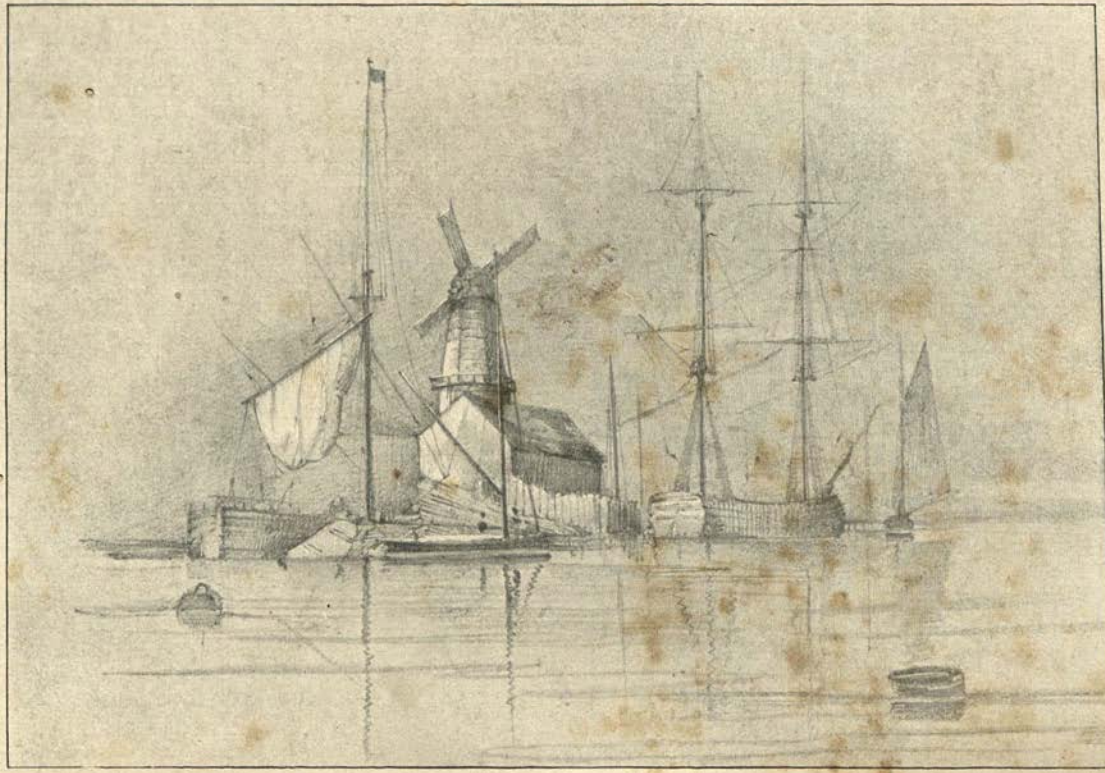
It was Alfred who kept the family-chronicles, and recorded all the comedy and tragedy of the house on the Quay. He tells of certain theatricals acted in the big playroom on January 11th, 1830, the day that was both James's birthday and his own: the farce of *The Honest Yorkshireman*, followed by the burlesque then in vogue, *Bombastes Furioso*. The farce came to a sudden end, because George laughed and broke down; but the burlesque was more successful—

The crowning success was where a grand scenic effect was produced—the door upon the vestibule-landing opened to the fife of James and the drum of Frederick, who were the Army, ascending up the stone staircase like the band at a distance. I don't remember anything going wrong till we were all killed—'aye, dead as herrings, herrings that are red'—an allusion which, like the simile of the 'brewer's horse,' told from the personal as well as the general application of their truth. I was knocked up by the time we got to the Finale; but we danced round to James's flute accompaniment—and soon joined the supper party in the dining-room. What stores of port did we then believe grew in my father's cellar; and how constantly the malmsey even lasted out the great occasions. Verily, good cheer seemed imperishable; and to me or James, whose birthdays came on the same day, it seemed as if a double portion remained to the youngest. Charles and George will never go to bed while there is a good story still to tell, after James has sung his song of *The Legacy*, or *Tom Bowling*, till we cry again. It was not the words, I say in excuse, 'twas the voice: 'twas a note or two of his that even now have a moving power in one of his speeches upon a family occasion.

[1] The friendship, begun at Charterhouse, was continued at Cambridge and in London. In his later years, George Paget used to say that it was he who had advised Thackeray to 'take to writing' when they were together at Cambridge; and that the character of Arthur Pendennis was drawn from Arthur Paget. There is a book, full of comic sketches by Thackeray, among the family-chronicles.

George and Charles and Arthur and James—long after I am or ought to be asleep there they are still on the landing, laughing and joking and answering again, till my sister has her opinion of the waste of candles, and the house seems as if it would never break up or go to bed.

But the family-chronicles for 1814–1830 are chiefly concerned with the elder sons, and say very little about James Paget: they just mention him, buying Christmas presents for his brothers and sisters, and racing with Frank Paget to pick up the Valentines—good solid gifts laid outside the back door of the house, after the Norfolk fashion. In later years he seldom spoke of his boyhood. The old sexton of Yarmouth church remembers playing with him when they were boys together, and says that he was 'always ready for a spree, just like other boys.' The plan that he should enter the Navy came so near fulfilment that his midshipman's dirk and outfit were bought for him: and the same plan had been made for his brother George, before him, thus to serve his country, as a midshipman on Sir Thomas Trowbridge's ship.



WOOLSEY'S MILL, NEAR YARMOUTH

(From a Pencil Sketch by James Paget during Apprenticeship)

II

APPRENTICESHIP, 1830–1834

WHEN the intention to enter the Navy was abandoned, it was decided that I should be a 'Surgeon'—meaning a general practitioner, or something in the Medical Profession—and that to this end I should be apprenticed to Mr. Charles Costerton, an active, energetic, and well-educated practitioner in the town. So, in the ordinary manner of the time, the deed of Apprenticeship to learn the art and mystery of a Surgeon and Apothecary was drawn up, and after the payment of a premium of 100 guineas was duly executed, on the 9th of March, 1830. The term of apprenticeship then required by the Society of Apothecaries was 5 years; but at the end of four and a half I was to be allowed to go to hospital-study in London.

Mr. Costerton's house, which is now Bunting's Tea and Provision Stores, stands on the Hall Plain, close to Sir Edmund Lacon's old house, and not far from the Town Hall. It is on the left hand, as one crosses the bridge over the Yare, from the Great Eastern Railway station. He used to attend Samuel Paget's family: Charles Paget had been his patient in 1824, and for many years afterward. He was very popular with his patients; was Mayor of the town in 1825; and had a large practice, but not the largest in Yarmouth.

I cannot doubt that the period thus spent was too long. The first year of it might have been

more usefully spent in some good school, the last in a London hospital: but the advantages of an apprenticeship were, or at least might be, far greater than is now commonly supposed. Many things of great utility in after-life could be thoroughly learned; things of which the ignorance is now a frequent hindrance to success: such as dispensing, and a practical knowledge of medicines, and the modes of making them; account-keeping; the business-like habits needed for practice; care and neatness and cleanliness in all minor surgery. Besides, in most cases, as in my own, the elements of anatomy could be slowly learned; there was time for reading and for natural history or any branch of science by which the habit of observing might be gained; and there was ample opportunity for observation in practice, without being confused in a crowd of cases in which it is, for a student, equally difficult either to study the whole or to make a good choice.

The necessary daily work was dull, and at times tedious and apparently useless. One had to be in the surgery from about 9 to 1, and again (I think) from 2 or 3 to 5 or 6, every day; and there one's time was chiefly occupied in dispensing, seeing a few out-patients, as they might be called, of the poorer classes, in receiving messages, making appointments, keeping accounts, and at Christmas-time making-out bills, and, for some, receiving payment. When the master came in from his rounds of visits, one had to write, at his dictation, for each day—*Die Lunæ, Die Martis, Die Jovis*, or whatever god it might be—the name of each patient he had

seen, the fact of the *Visitatio*, and the prescription for the medicines required. Then these were to be made-up and sent; the bottles to be neatly corked and covered; the pills to be duly rolled and smoothly rounded (no silvering then); the leeches to be put in their boxes with scarcely struggling-room; and all to look as neat as from any druggist's shop. And from this book were duly entered in another the supplies of time and physic, and the cost of each, for each patient. I was taught and soon learned to do all this by Mr. Costerton himself. The succession of apprentices which he, like other good practitioners, usually had, was by chance interrupted. But for this, my first teacher would have been one of my seniors.

In 1843, in reply to a letter from George Paget, he writes back that Mr. Costerton used to charge the following fees—Draughts, ℥j or ℥iss, a shilling; mixtures, Oj, five shillings, Oij seven and sixpence; pills, half-a-crown or three and sixpence. 'These were the highest terms, but they varied a little according to no rule—at least according to none that ever I found out or can remember. Leeches were sixpence each; bleeding, five shillings or ten and sixpence; cupping, a guinea. And, in general, visits were not charged at the same time as these medicines, unless the medicines given were insufficient to afford what was considered a fair remuneration. Often, the medicines alone were put down in the day-book; and, on making out the bill, if it were not deemed large enough (but only in that case), attendance was added in, in a lump or in interspersed visits.

Among the out-patients (as I have called them) were ulcerated legs, useful for bandaging, and coughs and colds, and occasional slight injuries; and not a few, especially women, who came to be bled. For at that time there were not a few,

especially among the country working-people, who deemed bleeding once or twice a year a great safeguard, or a help to health. They came frequently on market-days at the times of spring and fall, and generally did their day's work in the market and then walked to the surgery. There they were at once bled, and usually were bled till they fainted, or felt very faint and became pale; then a pad was put over the wounded vein, and a bandage round the elbow; and they went home, often driving three or four miles into the country. I have no recollection of any evidence that either good or harm was ever done by this practice.

Certainly I enjoyed these opportunities; and Mr. Costerton, a kind and helpful master, though hot-tempered and sometimes very indiscreet, encouraged me to use them well. He had been a pupil at St. Bartholomew's, and, for better study of anatomy, had dissected under Mr. Joshua Brookes, a renowned private teacher—a 'grinder' who, I believe, really taught anatomy far better than did the teachers in the Hospital-schools. With this help, I learned slowly the anatomy of the bones, and dissected some of the internal organs, and some portions of amputated limbs. Besides, in my second year I was able to attend a course of lectures on the bones, given by Mr. Randall, a young surgeon who had then just settled for practice at the village of Acle, about ten miles from Yarmouth. They were given in a room at the Angel Inn in the market-place, the class consisting of some six or eight pupils of surgeons in the town. I have full notes of them, and as I read them now

they seem at least as good as could have been derived from any demonstrations or lectures on anatomy in a first-year's study in a London school at that time.

The work that I was able to do in anatomy, helped as it was by reading, however discursive, gave me, I think, nearly as much knowledge of it as most students now have at the end of their first year of Hospital-study. And I gained, I think, a much better knowledge of practice in medicine and surgery than they do in their first two years. For I saw many cases, both among private patients and in the gaol and some schools to which Mr. Costerton was surgeon. I have notes of some of these, and, though they seem now like pieces of far distant history, yet they are enough to show that I was learning to observe, and was being taught to look closely into different methods of treatment. I saw, also, many operations done by different surgeons in the town; for I was generally invited to them, and some were well and some very ill done, and my master, who had good operative skill, taught me all he could in his criticisms of them.

Singularly, the first case I ever saw was such an one as I never afterwards met with. It was on the 17th of February, in the severe winter of 1830, before I was apprenticed. A young boatman was pushing off his boat, over the bow of which was one of the big swivel-guns then in common use for shooting wild-fowl as they flew in flocks low over the snow or ice. An accidental pull at the trigger fired the gun, and the great charge of big shot

went through the inner half of the poor fellow's left knee- and elbow-joints. Both limbs were amputated. He bore the operations very bravely (there was no use of ether or chloroform then), and I bore the sight of the amputation of the thigh; but, when the first intense occupation of the mind in curiosity was over, there seemed more opportunity for sympathy, and at the amputation of the arm I was very faint, and had to stand aside, useless.

The notes of this case were the first I ever took. As I look through this case-book, I find evidence enough of good opportunities for the practical learning of elemental things; and there was time enough for reading-up the cases; not, perhaps, in the best of the works then recently published, but in such as sufficiently helped me and excited interest. I read, I believe, the whole of Mason Good's 'Study of Medicine,' and all Cullen's 'Practice of Physic,' and much of his 'Materia Medica.' I read, also, the courses of lectures by Abernethy, Astley Cooper, and Lawrence, published in the 'Lancet,' and Thompson's 'Lectures on Inflammation'; all the papers in the 'Cyclopædia of Medicine,' then in course of publication, all the current numbers of the 'Lancet,' and many more books, from which, probably, I learned little more than the art of reading quickly.

Among the chief events in the time of my apprenticeship was the first epidemic of Asiatic cholera, that of 1832. It was believed to have been brought to Yarmouth by sailors from New-

castle, and was severe. I saw many cases of it, and saw them vainly treated—some with bleeding, some with calomel and opium, some with saline injections into the veins—all uselessly, though I can still remember the surprising and misleading revival of a woman who, while the saline injection was going-on, was roused from an apparently impending death in the cold blue collapse, and sat up and talked, and for an hour or two seemed quite revived. I worked hard in the epidemic, seeing all the cases that I could, and reading everything about the disease that I could find in books and journals; and made a volume of abstracts of all my reading, orderly arranged.

It is hard to remember anything of the methods of practice, then generally used, which is still instructive; for observations on the effects of treatment were vaguely made, not exactly recorded, not tabulated; and the principles were deemed sure, whatever consequences might ensue from observance of them. Yet, from some parts of the practice, one may still derive instruction.

I have spoken of the utility of an apprenticeship for the study of science: and I cannot be too grateful for the opportunities which mine gave me for botany and some portions of zoology. My mother's love of collecting had influenced in various degrees all her children; chiefly, in relation to natural history, my next elder brother Charles and myself. He gave himself chiefly to entomology; I to botany, being guided to it by Mr. Palgrave, a nephew of Mr. Dawson Turner, who

represented in Yarmouth what might justly be called the Norfolk School of Botanists. Its leader had been Sir James Smith, the purchaser of the Linnæan collections and chief founder of the Linnæan Society; and now its chief members were Mr. Turner and his son-in-law Sir William Hooker.

I cannot remember all the times at which I used to collect. I think they were chiefly on Saturday afternoons, and on casually unoccupied bits of days, and often before breakfast, when I could gather algæ on the beach, and the plants which were abundant on the Denes and sand-cliffs and salt-marshes near the town, and were valuable for exchange with inland collectors. They were enough to enable me to make a nearly complete collection of the Flora of the district, with specimens for exchange with other botanists, especially with the Hookers and some of their pupils, and with Coterell Watson. I was able to study the Flora pretty fully after the manner of that time—the merely descriptive manner fit for exact systematic arrangement in the Linnæan orders, then deemed natural enough, though now looking so rigidly artificial. My father in his wealthy days had collected a considerable library; not for his own use—for he was too busy, and had never been able to cultivate his natural good taste and love of all beautiful and gentle things—but for the use, as he hoped, of his children, whatever might chance to be their tastes for study. And among his books were the great English Botany of Smith and Sowerby, in its 36 volumes, with coloured

plates of all known Phanerogams; and Dawson Turner's 'Historia Fucorum' with its beautiful illustrations. With these and a few more I could fairly and fully study my botany, could name and arrange the specimens, and make myself enthusiastic in collecting. I studied the botany of the district sufficiently to take part with my brother Charles in publishing the *Natural History of Great Yarmouth*; a thin 8vo in which I first appeared in print. He supplied the entomological part of it, I the rest, using not merely my own collections but those of all the local naturalists who had recorded anywhere within my reach their observations. The enumeration of species was, I think, nearly complete for that time. It would be more than complete for the present time; for drainage and various cultivations, including even that of Natural History itself, have sadly exterminated many of the species we used to be proud of.

I think it impossible to estimate too highly the influence of the study of botany on the course of my life. It introduced me into the society of studious and observant men; it gave me an ambition for success, or at the worst some opportunities for display in subjects that were socially harmless; it encouraged the habit of observing, of really looking at things and learning the value of exact descriptions; it educated me in habits of orderly arrangement. I can think of none among the reasons of my success—so far as I can judge of them—which may not be thought-of as due in some degree to this part of my apprentice-life. My early associations with scientific men; my

readiness to work patiently in museums, and arrange them, and make catalogues; the unfelt power of observing and of recording facts; these and many more helps towards happiness and success may justly be ascribed to the pursuit of botany.

And, as I look back, I am amused in thinking that of the mere knowledge gained in the study—the knowledge of the appearances and names and botanical arrangement of plants—none had in my after-life any measure of what is called practical utility. The knowledge was useless: the discipline of acquiring it was beyond all price.

But, although I spent much of my spare time in botany, there was plenty still to spare; and in some of this, chiefly in the evenings, I taught myself to read French. Hammering away with Bichat's 'Anatomie Générale' and Chambaud's Dictionary, but having no grammar, I learned to translate accurately enough to understand and remember what I read, and to acquire the beginning of the knowledge of languages which, miserably incomplete as it always was, helped me so much in after-life. I translated nearly the whole of Bichat 'Sur la Vie et la Mort,' and can amuse myself with looking over the manuscript even now. Besides, I could thus study Cuvier's 'Règne Animal,' and made tables of his classification, which I tried to learn by posting them in my bedroom to read while dressing.

In close connection with the study of natural history was that of some small measure of the fine

arts. My father was a friend and patron of Old Crome, and my mother and some of her children were taught by him: she indeed, as I have said, became, while he educated her admirable natural power, so skilled that some of her oil-paintings would anywhere pass for those of her master. Pictures, engravings, drawings were everywhere in the house: and art and artists were talked-of; and 'Young Crome' succeeded 'Old Crome' in his weekly visits at the house, and nearly all of us had lessons from him. Two of my brothers, Charles and Alfred, might have lived as artists, such skill had they; I had very little; yet it was enough to enable me to learn to make sketches of scenery and of some of the simpler objects of natural history, and even of pathological specimens. Some of these are in the Hospital collection; a fungus hæmatodes, and an ulcerated cæcum—with which I remember that the widow of the patient was so charmed that she begged for a copy of it. I wonder whether this is now in the possession of her distinguished grandson.

I may repeat concerning this meagre education of a little artistic skill and taste nearly what I have said of botany. Its immediate utility was too little, its indirect utility too great, to be told. It helped to enable me to look and see more in things than some could see; it strengthened the power of remembering things seen; it made it easy to illustrate my lectures with sketches which I could describe while making them; and it helped to give me such a love of scenery and of pictures that I have never once regretted my having been unable

to learn any one of the sports or active games which to some seem essential to the happiness of a holiday.

I hope it will not be thought, from this account of my apprenticeship-work, that it was very laborious, or that I led a dull unsocial pleasureless life. I could wish that I had more nearly done so; but in the four years and a half there was more than time enough for the work here told-of; there was still time not only for the reasonable amusements of social life, but for the idle silly gossip, the balls, fairs, races, regattas, vilely corrupt elections, the ignorant political controversies, and a crowd of idlenesses from which I can remember many mischiefs, but have never yet found one abiding good which might not have been gained without harm in better pursuits.

Thus, after my four and a half years of apprenticeship, and when I was nearly 21, I was to begin my hospital-work with about as much knowledge of anatomy and physiology as, I suppose, an average student of the present time has at the end of his first year's hospital-study; with more knowledge of medicine and surgery than such an one would now have after two or even three years' study; and with an unusual disposition for scientific pursuits, and an unusually educated power of observing.

COMMENTARY.

The family-chronicles for 1830–1834 tell of George Paget's success at Cambridge, and Arthur Paget's death. The news that George Paget was bracketed eighth wrangler, in the same list with Amphlett, Budd, and

Selwyn, came in 1831. 'In ten minutes,' say the family-chronicles, 'the whole House was uproarious, and you may easily conceive the delight of all: Charles and James said it was worth reading a whole life, to have such an hour of rejoicing.' A year later came the news of his Fellowship of his College; and his mother writes, congratulating him—

February 26th, 1832.—My beloved and dear George—How am I to express myself, or what am I to say? Good God, never can I express our delight and astonishment when we opened your letter in the Post Office Row. Surely our gratitude ought to have no bounds, for such mercies could not be bestowed upon us without the divine interference of an all-merciful God—may we ever with humble thankfulness praise Him who has showered such blessings upon us. I need not say again and again the excessive and heartfelt delight of your beloved Father. Yours and yours for ever,

S. E. P.

The death of Arthur, 'the son whom I think she loved the best of all,' was on December 26th, 1833. A diary kept by one of them says that in the last few days of his illness he was very irritable, and could not bear to have people with him—

From James, however, he would bear almost anything, and appeared to lean completely on him. For James' own health's sake, we used to force him to go out: his constant attendance on Arthur has completely broken up all the plans that he had previously formed for the winter. He says 'I had begun in earnest to get up Euclid, but I was stopped at the end of the first Book. I must now make up my mind to go on with it, as well as get up Latin and Greek again, in which I find myself most woefully deficient. I shall have full time to do these, and, if my life should last till then—which I cannot but say now whenever I mention the future—a variety of other things.'

In these days of his apprenticeship James Paget set up a galvanic battery, and taught himself some chemistry; and thought of going to study at Leyden, where he could live, Mr. Dawson Turner told him, on £65 a year. And he gave so much time to botanizing that an old lady of Yarmouth said the young man walked about too much to be a student of medicine. There is a letter to him, early

in 1830, from his cousin, Dr. Moor of Chester, advising him about his work. The advice given was not very valuable.—'Do not read medical books for the first three months at least. They will only confuse you. . . . Look at and handle the various Instruments—learn the quantity of the weights and measures, with their different signs—examine the Drugs—and, if possible, become familiar with the different bones of the Skeleton. . . . Do not let the *number* of the Instruments and Drugs frighten you. You may carry *all* your rattletraps in your waistcoat pocket, and all the articles of the Materia Medica *really* useful may be contained in a Quart Bottle.' Paget kept this letter: and, many years later, docketed it *Very poor and foolish.*

The 'Natural History of Yarmouth.'

The two brothers, Charles and James, published this book in November, 1834: a few weeks after the younger brother had entered at St. Bartholomew's Hospital. Its full title is 'A Sketch of the Natural History of Yarmouth and its Neighbourhood, containing Catalogues of the Species of Animals, Birds, Reptiles, Fish, Insects, and Plants, at present known. By C. J. and James Paget. Yarmouth. F. Skill. 1834.' They hoped to make a little money by it—'We have in view the attainment, by some honest means or other, of such ends as may enable us each to relieve the fountains from which hitherto all our supplies have flowed.' (*James Paget to Alfred Paget*, 1834.) It was sold cheap, at half-a-crown; and in 1838 there were but 37 copies left unsold, 10 in Yarmouth, and 27 in London. The catalogues take up 88 closely printed pages, and give the names of 766 insects, 729 flowering plants, and 456 non-flowering plants. The Introduction, 32 pages long, was written by James Paget: his notes show how hard he had worked, and with what patience he had gone over the ground:—

Anchusa sempervirens.—By Haddiscoe church in plenty, and occasionally an outcast of gardens. In the spot where it used 20 years ago to grow in abundance, by the Burgh Castle road, it is now entirely lost; and it is singular that *Lamium album*, which at that time was never found near Yarmouth, now almost over-runs the same hedges.

Cineraria palustris.—This used several years ago to grow in the greatest abundance in a marsh at Caister and elsewhere. It is now very rarely and uncertainly seen at Belton, or by Ludham and Heigham bridges.

Alopecurus bulbosus, A. geniculatus, A. fulvus.—All growing in more or less abundance in marshes at Runham, Caister, etc. The first, in the dryest spots; and the latter floating in ditches; and they may be traced into one another by the closest and most regular gradations.

And his account, in the Introduction, of the beach-grasses and seaweeds of Norfolk, is a good instance of his early power of observation:—

In the sand of which the whole coast is more or less composed, vegetation is of course but scanty; on the beach and the hills of drifted sand, which form the marrams, but few plants indeed could be expected to flourish, owing to the great want of water, which in the heaviest rains is almost immediately filtered through, before it has remained sufficient time to be absorbed by their roots. They consist almost entirely of the marram and some grasses, which require but little moisture, and of others, whose long roots penetrate to a sufficient depth below the sand to enable them to reach any which may exist. But in few parts of the vegetable kingdom are more interesting cases of the beautiful adaptation of the different parts of creation to be found than here. Were it not for the simple uninteresting-looking plant, the marram-grass just mentioned, it is probable that all the country along the coast must long since have been inundated or buried; its long creeping roots, extending in many instances for twelve or fourteen feet in length, at a distance of two or three inches below the surface, and crossing and matting with each other in every direction, effectually bind down the sand blown up from the beach; while the short strong foliage prevents its being blown over the land in the neighbourhood, which is thus maintained capable of high cultivation. It has been interesting to observe, as the Yarmouth North pier has been built out, and the bank of sand has been formed to the North of it along the beach, so as to oblige the sea to retreat for some yards distance, how these plants have gradually crept down towards the water, fastening the sand as it accumulated. . . .

The marine Algæ may be regarded in almost the same light as those birds which are occasional visitants here, none except

the more common of them growing anywhere in the immediate neighbourhood: and the majority of those which are thrown upon our beach (being probably natives of the cliffs at Cromer, or of the rocks on the Northern coasts) as the roots are not always washed on shore, and, when they are, have seldom any soil attached to them, it is hardly possible to discover precisely from whence they come; and no one part of this study is subject to greater uncertainty than the collecting this tribe. Their appearances are most irregular. The prevalence of easterly and north-easterly winds has considerable influence in increasing them, though this is by no means regularly the case; the occurrence of unusually high tides, and of long-continued rains, also seems in many instances to have been followed by a greater abundance; and again, as far as merely local conditions are concerned, the form of the beach which may happen to exist at any season will always have more or less effect on the quantity left upon it. Yet all these circumstances combined appear by no means sufficient to account for the great differences which may be observed in the course of a few years' collecting, and which it is most probable depend on changes of condition taking place at the situation of their growth.

It is almost exclusively to these and similar objects of interest that the botanist's attention ought now to be directed. Probably no neighbourhood has been so completely investigated as this, which has had the good fortune to have been for nearly a century the constant stage for the action of some inquiring mind. But, although there be so small a chance of reward in the discovery of new species, there still remains, to encourage the steady pursuit of this part of natural history, a vast number of objects hitherto little investigated, or altogether unknown: such as the laws governing the distribution of species, to the knowledge of which local observation so materially contributes; the determination of the modifications in structure which may arise from variety in situation of growth, and other external circumstances; and a number of other questions of a similar nature, to each of which local information is absolutely necessary.

At the time when the 'Natural History of Yarmouth' was published—which was just a quarter of a century before the first edition (Nov. 1859) of the 'Origin of Species'—James Paget was twenty years old. The following letters come, as it were, between the period of

his apprenticeship and the period of his life as a medical student in London :—

1. *From Dr. (Sir William) Hooker to James Paget.—Glasgow, Feb.* 10, 1833.—My dear Sir,—I have learned with much pleasure from Mr. Turner that you are zealously devoted to botany, and that you have made a considerable collection of the plants of your part of England. Those of the more northern parts of our island are, perhaps, less accessible to you, and I have, therefore, done myself the pleasure of sending you some from our Scottish Highlands, and others from different parts of England, & one or two rarities from Ireland, which may not yet have found a place in your herbarium. Perhaps, at some future time, I may be able to add to this number, as I am frequently receiving collections from various parts of the kingdom, besides those which I have, from time to time, the opportunity of collecting. Indeed, so great is the demand upon my stock of duplicates, from the circumstance of my having written on the plants of this country, that I am very desirous of having correspondents in different quarters, who may have it in their power to communicate to me specimens of the more local plants of their neighbourhood. In your county, and in the adjoining ones, for example, are many species which are quite unknown in these colder regions: and if you are in the habit of drying a large stock of duplicates, which I should strongly recommend to you, for the purpose of exchange, I shall be thankful to receive some of them. On the other side I have drawn out a list of such as I shall be glad to have, but I must beg you to give yourself no trouble about them. They are not necessary to my herbarium, but chiefly for the purpose of giving to others.

2. *James Paget to Dr. Hooker.—Yarmouth, Feb.* 21, 1833.—My dear Sir,—I really do not know how sufficiently to thank you for the extremely handsome and acceptable present which I received to-day through the kindness of Mr. Turner: far indeed did it exceed my expectations and still more my merits. The assistance of (I may fairly say) the two first botanists in the Kingdom would be sufficient to encourage a much less ardent lover of science than myself to continue it. With not more than two or three exceptions, all the plants were entirely new to me, and they were those which, of all others, I was most anxious to possess, both on account of their beauty and rarity. My employment has hitherto kept me exclusively confined to this town and its immediate neighbourhood, and I

have therefore had entirely to depend on the kindness of friends for any but Yarmouth plants. I have also to regret that I have been more anxious to obtain a variety of different species than a number of duplicates of any of the rarer—so that I am unable to send you anything that I could hope would be at all useful. I need not say that I shall pursue a very different course in the next season, and that you will be the first I shall attempt to repay; though the full debt I shall, I fear, be scarcely ever able to discharge. Believe me yours truly,

JAMES PAGET.

3. *James Paget to Charles Paget.—London, Nov.* 3, 1834.—I rather think that there is a long list of letter-debts due from me to you, which, though in an especial hurry, I will try to discharge now—and so to do, proceed at once to the description of what will probably be of most interest to you, my 'Entomological Transactions.' *Imprimis* then, I dined last Monday at Mr. Children's, who very civilly invited me, almost directly he heard of my being in town. I there met three, as it seemed to me, most spicy entoms—a M. Gorry, a Frenchman, who is arranging the Lepidoptera in the British Museum; Mr. G. R. Gray, a sort of private secretary apparently to Mr. Children, who has the care of all his collections, and who has been arranging and naming his Lepidoptera; and Mr. Shuckard, who is about to publish a work on the British Hymenoptera, of which Mr. C. says he knows more than anyone in the kingdom. I made myself as civil as possible, and these two last gave me their directions, and assured me they would be very glad to name any of your insects. . . . Mr. Newman I would not, if I were you, have anything to do with—they were all making the greatest joke of him, and most deservedly. I saw a book of his called 'Sphinx Vespiformis,' in which he propounds a theory that seven is the most proper number for the divisions and subdivisions of nature, and advances in its favour the existence of the seven Brazen Candlesticks, seven Spirits of God, &c.—and then boasts that this theory was the result of the occasional employment of his thoughts during one month, but that he was so convinced of its truth that he would no longer keep it from the world. But enough of him—If you send up any Coleoptera, I would take them to Mr. Children, who would, I have no doubt, get them named; though you must not expect any great rapidity even in my own movements, inasmuch as I find time the most valuable article just at present in my possession. . . .

So far for entomology, and I hope I have not omitted anything of importance, though I am obliged to remember as fast as I can possibly write. I leave anything I may have omitted, to North's leaving here on Friday morning. We dine there on Thursday. Yours most affectionately,

JAMES PAGET.

P.S.—One thing that I have forgotten is that I shall be very glad to hear from my father—inasmuch as I have the honour of being master of no more than two shillings of the coin of the realm.

4. *James Paget to Dr. Hooker.—London, Nov.* 25, 1834.—My dear Sir,—Will you do my brother and myself the favour to accept the accompanying sketch, our maiden attempt as authors, and to treat with leniency the numerous defects which one so well acquainted with the subjects and localities it treats of as yourself must immediately discover.

You will see by my address that I am pursuing a very different mode of living to that which I was following when I had the pleasure of seeing you. I should not indeed have delayed nearly so long before despatching this, had not almost incessant employment at the Hospital (St. Bartholomew's) prevented my giving any time to other pursuits.

The same reason, too, must be given for my not sending before a portion of my summer's produce to your son. Having been entirely confined all the season to Yarmouth, there are of course none among what I have sent that will be new to him, but I hope he will find some that may be useful as duplicates. I hope that I shall be residing here for the next year at least—when I have no doubt I shall be able to procure some that will be more acceptable to him.

5. *James Paget to Alfred Paget.—London, November,* 1834.—I *do* think the book a handsome one, & certainly it *is* too cheap; but our opinions are now of the least importance. It is I hope by this time in the hands of many far less interested. I shall be glad to hear of a little credit gained *there*, as it is impossible *here* to be visible in the crowd unless you are either a giant in your own person or stand on an eminence of others' raising.

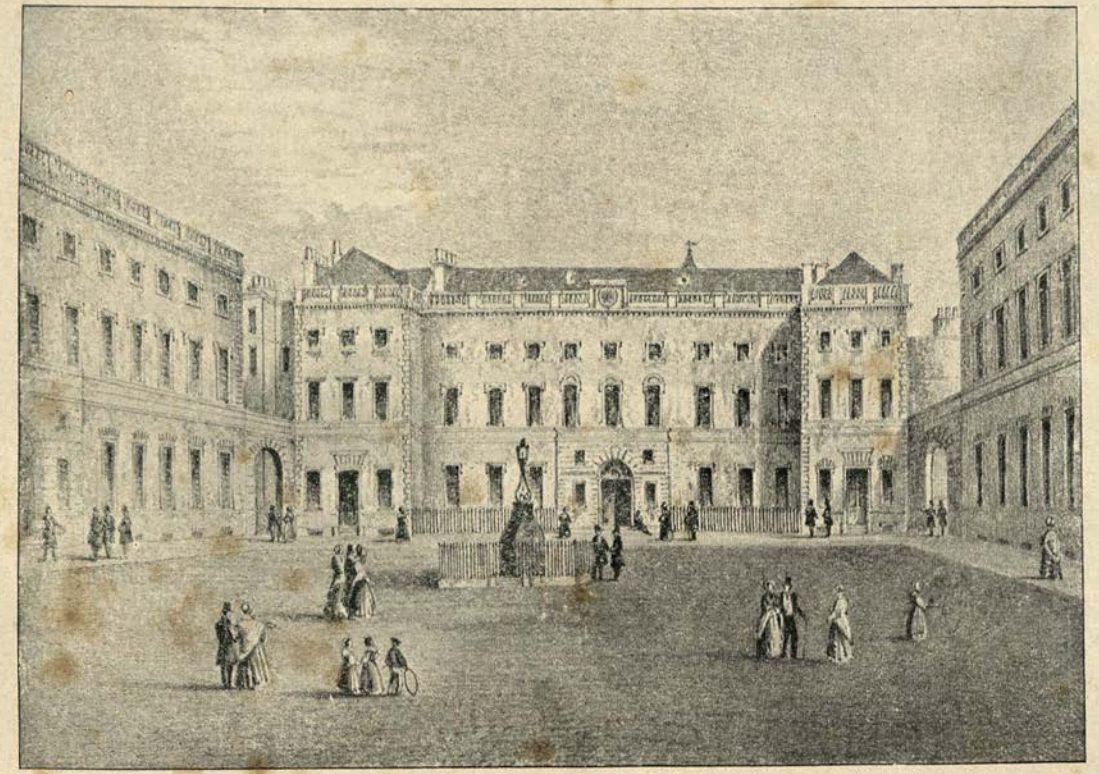
To Charles, say that I went this morning to the places he mentioned. I could not help feeling rather queer, after having looked at about thirty booksellers' and publishers' names in

Paternoster Row, where no other trade can live, & then going into half-a-dozen different counting-houses before I could find the right one, and being stared at by about 20 clerks and shopmen—discovering myself in the presence of one of the celebrated firm of Messrs. Longman, Rees, Orme and Brown, with a book of my own in my hand. I saw the last of these gentlemen, he showed a good deal of business civility, and said they had no objection to take 25 copies in the usual way, and try to sell them. Of course you are aware that *they* do not buy them.

These letters show in what spirit he began his life in London. He was not yet of age; but they are the letters of a man of science. His first book was in the press; he had the help of the greatest English botanist, and the friendship of his son; and his desire was to be a Fellow of the Linnean Society. On November 3rd, 1834, he had two shillings in his pocket; and he was to meet his future wife at that dinner at the Norths that he mentions so unconcernedly in his letter to his brother.

He has written, in his Memoirs, of his early ability in drawing. His sketches of the neighbourhood of Yarmouth show the utmost accuracy and lightness of touch: among them, there is an admirable sketch of Gorleston pier, that he made, for a wager with one of his brothers, before breakfast. He had an eye for a ship; and kept, all his life, his knowledge of shipping, his love of the sea, and a trace of Norfolk accent. London never quite effaced Yarmouth in him. And it is probable that the healthiness and freedom of his early life at the sea were the saving of him through the years of waiting for practice in London.

LIBRARY OF THE BOMBAY



ST. BARTHOLOMEW'S HOSPITAL IN 1844
(From Delamotte's History of the Hospital)

III

HOSPITAL PUPILAGE. FIRST YEAR: 1834–1835.

I ENTERED at St. Bartholomew's Hospital on the 3rd or 4th of October, 1834. I had never been much more than 20 miles from home, and everything was new to me; but the little that remains in my memory of the surprises and first impressions of London is not worth telling. St. Bartholomew's was chosen for several small reasons. It had been my master's school, and my cousin's, Dr. Moor's; and Dr. Haviland's, who was then Professor of Physic at Cambridge; and my brother, recently elected to a medical fellowship at Caius', had College-friends studying there. Of these, the two whom I first saw, and afterwards saw most of, were idle men, expecting, as many then did, that their University education would give them sufficient claim to as much success as they cared for. The University of London was then young and seemed contemptible; 'Scotch Doctor' was in many minds a name of just reproach; none but Cambridge or Oxford men were deemed fit to be physicians to St. Bartholomew's or even, by some, to be Fellows of the College of Physicians. But the belief in this privilege was decaying; and my brother's friends were among many whom it beguiled to a complete failure, though they were very pleasant gentlemen with fair abilities.

My brother's University position was of great value to me. His fellowship was a rich one, and enabled him to advance the money for my entrance-fees, which my father, whose business-difficulties were pressing heavily, could not at once supply. He lent enough for me to enter at once for all the lectures and practice then required; I think about a hundred pounds. Besides, his intimacy with University men introduced me at once into a 'good set'; for some among them were men of excellent ability, and they all held themselves to be rather superior to even the Hospital-apprentices, who were deemed superior to all the rest of the school. Thus introduced, I had at once a good social position in the Hospital, and the repute of being a gentleman, though living very cheaply; and I began at once to work steadily, though often pretending to be rather idle.

For the great majority of students, and for myself at first, work at that time had to be self-determined and nearly all self-guided: it was very little helped by either the teachers or the means of study. In 1834, the Hospital had begun to decline among the schools. It still had a high place: but University College (the London University as it was then called) was rising; and there was a sharp opposition close by, in the Aldersgate Street school, where were Skey and Pereira, and some active demonstrators, and where more 'grinding' was done. At St. Bartholomew's, the school was not in good working order. There was constant dissension and mischievous rivalry among the teachers: and since

Mr. Abernethy's retirement there had been no one willing to do the constant routine-work of management in the school, and who was at the same time either strong enough or pliant enough to get his own way. Lawrence could have done anything: but he was disliked and hindered by many of the surgical staff; and, great as was his power in controversy, he evaded it when he could. Latham had more than intellect enough; but he was not fond of common school-work; he hated all disputes; and these never would have ceased while Hue his senior colleague lived. Stanley was the only one who worked hard for the school; but, with all his good qualities, he was timid, easily ridiculed; all his defects were on the surface, and men with half his good qualities and twice as many faults could appear better and have more influence than he. Burrows, who could have done everything, was a junior on the medical side: and the strength of the school was so much more surgical that even his courage could not have invaded it.

Thus it was, I think, that the school was slowly declining in numbers and in fitness for teaching; though still it offered more than opportunities enough for those who could teach themselves. There was very little, or no, personal guidance; the demonstrators had some private pupils, whom they 'ground' for the College examinations, but these were only a small portion of the school; the surgeons had apprentices, to whom they seldom taught more than to other students; for the most part, the students guided themselves or one another to evil or to good, to various degrees of

work or of idleness. No one was, in any sense, responsible for them. I am not sure that, being well disposed for work, I was the worse for this. Certainly there is a greater evil of an opposite kind —that of being taught to become the mere disciples of a great teacher of some science; there were some at the Hospital who might have been much stronger men if they had not thought it enough to be like Abernethy, and like enough to him if they imitated his manners; and elsewhere I have often seen men stunted by being tempted or compelled to be content with discipleship. [? True of intellectual discipleship; not of moral.]

The helps to learning were, as one would now think, very defective, though, so far as I know, as good as in any other Hospital. There was a small library stowed away in a room next the operating theatre (which was then on the second floor of the Eastern wing of the Hospital, where Darker Ward now is) and which was used, on Saturdays, for surgical consultations, dressing, and hand-washing. Books were given out as from any subscription-library: but there was no reading-room. In place of this, some self-elect of the pupils, making themselves into a kind of club, had a small room over a baker's shop near the Hospital-gate, where we could sit during intervals of work and read the journals, and where some, in the evening, played cards; but there was nothing to encourage any kind of book-learning; and Lawrence was the only teacher who had any literary reputation.

The dead-house (it was never called by any better name) was a miserable kind of shed, stone-

floored, damp, and dirty, where all stood round a table on which the examinations were made. And these were usually made in the roughest and least instructive way; and, unless one of the physicians were present, nothing was carefully looked-at, nothing was taught. Pathology, in any fair sense of the word, was hardly considered.

The Museum was admirably different. It was in good order and good repute. It was but a few years since Stanley and Abernethy had given to the Hospital Governors their collections, which had previously been kept in the Hospital for use at lectures, but had been considered private property. The catalogue was printed, and the keeping of a case-book was begun. Stanley, who as Lecturer on Anatomy had charge of the Museum, was very zealous in collecting; and, though he greatly preferred specimens of diseases and injuries of bones, he loved and added-to the whole collection. Lawrence and Burrows also used it well and promoted it; and Latham had some esteem for parts of it. The Curator was Mr. Baynton, a very neat and careful dissector, a clever pretty artist, admirable in all the mechanical part of his work, but, whether through idleness or weakly health, not studious, not ready to go beyond that part of it; his study of anatomy, whether normal or morbid, was completed when an illustration of it, well-dissected, was displayed in clear colourless spirit, in a well-fitted bottle, air-tight, with a perfectly well-painted cover, duly numbered and very briefly catalogued. These may seem to indicate a very low ambition for one in the opportunities of

a high scientific study: but the mental qualities which they indicate, and which I could try to learn, are of great utility. It is essential to the progress of knowledge that some should possess them, and very desirable that all should respect them. I was Baynton's successor in the Curatorship of the Museum, and his good example in all the technical part of his duty did me great good: for, although in my botanical work I had educated my inherited love of collecting, and the habits of carefully preserving and orderly arranging, yet I am not sure that, without so good an example, I should have readily done my best for a collection which was not to be my own.

The owner of a collection may be, but the keeper must be, a lover of art or science or literature. The owner cannot but have some selfish pride that the collection is his own; he may have no higher thought about it than this, poor as this is. The keeper may often feel as if all that he had gathered and accumulated for others were his very own; but he may love them nearly as well when, reflecting on them or leaving them, he remembers that they are none of his. The keeper of a collection is often a far nobler man than the owner. (So—the gardener and the squire—the librarian and the great master of the house.) But, however this may be, the Museum was a real help to study; a constantly present good example of scientific work in progress; and if they were only a few who were made better by it, it was through no fault or defect of its own or of those who had charge of it.

Of the Lectures then given it is as hard to speak in general words as it might be of those at any present school. They were so various in quality: some so good, some so not good. Those of Lawrence were, I think, the best then given in London: admirable in their well collected knowledge, and even more admirable in their order, their perfect clearness of language, and the quietly attractive manner in which they were delivered. As I remember them now, I feel that I did not esteem them half enough at the time. It was a great pleasure to hear them, and a good lesson. They were given on three days in the week at 7 in the evening, after dinner. He used to come to the Hospital in the omnibus, and, after a few minutes in the Museum, would, as the clock struck, enter the theatre, then always full. He came with a strange vague outlook as if with uncertain sight; the expression of his eyes was always inferior to that of his other features. These were impressive, beautiful and grand—significant of vast mental power well trained and well sustained. He came in quietly, and after sitting for about half a minute, as if gathering his thoughts, began, in a clear rather high note, speaking quite deliberately in faultless words as if telling judiciously that which he was just now thinking. There was no hurry, no delay, no repetition, no revision: every word had been learned by heart, and yet there was not the least sign that one word was being remembered. It was the best method of scientific speaking that I have ever heard; and there was no one, at that time, in

England, if I may not say in Europe, who had more completely studied the whole principles and practice of Surgery.

Stanley lectured on Anatomy and Physiology every day, Saturdays excepted, at half-past two. The physiological portion of the lectures was, even for that time, feeble; he had never studied chemistry, physics, or any adjacent part of the science, and the physiology of even that time was beyond his grasp. And the anatomy was very elementary: but he lectured so carefully and clearly, he was so deliberate and simple, so grave and earnest, and he repeated all the 'tips' so frequently, without changing one important word, that I believe there was not in London a more instructive teacher than he was. Besides, his occasional attempts at 'style' were so funny that they were easily remembered, easily imitated; and, in association with them, the words he used were well remembered too. It was believed that one of my friends, who afterwards became a distinguished comic writer, passed the College solely by means of the bits of lectures with which he used to make fun by imitating Stanley.

It would be hard to find two men more unlike than were Lawrence and Stanley; and yet it would be hard to say which was the better teacher, if one would reckon the effect not only of their words (for Lawrence's were nearly all in print) but of their personal influence on students. Lawrence was almost inimitable, unless by those of unusual ability and rare cultivation; and he never seemed in difficulty. Stanley made all feel the value of

dull hard work, the use of accuracy in common things, the need of learning the very commonest facts: his honest plodding day's work was a lesson to any one who would watch it kindly, and the story of his life was full of teaching. As a boy he was poor and poorly educated; as a hospital-student he was ridiculed and bullied; as a teacher he was opposed, hindered, laughed-at in journals and caricatures; some of his colleagues did their best to make him miserable: and yet he became constantly more esteemed, more trusted, more gladly worked-with by those who knew him well; and these became constantly more numerous; for he was completely honest, true and truth-loving, keenly conscious of his duty and resolute in doing it.

It was singularly happy for me that I had the teaching and the example of both Lawrence and Stanley: I learned nothing but what was good from either of them and, even in the later intimacy of colleagueship and friendship into which I grew, found constantly more to esteem in both, even though the contrast between their intellectual characters became more marked.

The other chief lecturer was Dr. Hue, the Senior Physician to the Hospital. He lectured, on alternate mornings, on the principles and practice of Medicine, and on Chemistry—then including heat, light, and electricity. It may seem a strange evidence not only of the improvement in schools, but of the advancement of science and of its progressive divisions, that he had only lately ceased to lecture also on Materia Medica and

Botany; and that few could now be found who could lecture so well on any two of these subjects as he did on all the four. I will not say that Dr. Hue's teaching justified his holding both the lectureships. He was an accomplished gentleman, a good scholar, and a fair speaker in well-chosen English. But both medical and chemical science were now far in advance of him; and when he had to speak of things, learned within the last ten years but now commonly talked of, including even most of those which had been taught by Laennec and others who familiarly studied with stethoscopes, he used to speak with hesitation and with a timid shirking look, as if in haste to get away to something easier; he was too honourable to pretend to think lightly of them. Hence, and because of his inferiority to both Latham and Burrows in his knowledge of medicine, he had very little influence among the students: his lectures taught little; few attended them, and he discouraged attendance in his wards; indeed it seemed rather as if none were allowed there except two or three whom he selected, and with whom, being a brother of a Cambridge man, I was admitted. But, little as was Dr. Hue's utility or influence among the students, he was for some years a great power in the school: for, besides his attractive personal qualities, he was rich, sagacious, and self-willed. He had great weight with the Governors; who, at that time, watched jealously the growing importance and influence of the school, and were guided by him, I think, more than by all the staff besides. He was the chief force on one of the sides in the

disputes by which the school was being damaged; a thorough old Tory in all that could belong to medical politics.

Of the other teachers during my pupilage, Roupell was lecturer on Materia Medica, Burrows on Medical Jurisprudence, Farre on Botany: but they were all young and only lately appointed, and they lectured, for at least a part of the time, in a room over the carpenter's shop which then adjoined the Anatomical Museum. Burrows and Farre were excellent lecturers; Roupell was not, but very amiable, and profuse in his readiness to help.

Owen, then early in his career but already great in his way, gave a short course of lectures on Comparative Anatomy; but these were not required for certificates, and I did not attend them.

Wormald—Tommy Wormald, as he used to say he was called—was the Senior Demonstrator, and gave the demonstrations, that is, the daily morning lectures on anatomy. For then, and for several years afterwards, there were really two courses of Lectures on Anatomy. In Stanley's, Anatomy, Physiology, and Histology were combined; the arrangement was according to structures—bones, muscles, arteries, and so on—and these were called the Lectures: in Wormald's, Anatomy alone was taught, and in the order of the parts dissected—arm, leg, neck, &c.—and these were called Demonstrations. They were completely practical, and often very instructive. The Demonstrator was supposed to go through the whole of the anatomy that could be taught in dissections; but he could omit what he did not like or did not know.

Wormald did this; but what he did teach he taught well, in very plain English and with good illustrations. Among the great majority of the students, he was the most popular of all the teachers. He was a shrewd hard-headed Yorkshireman, muscular, hearty, with plenty of rough wit and plenty of good stories; he had no taste for anything that could be called science, but abundant common-sense and sharpness, and good mechanic skill. I might have learned more than I did from him, but that, as I worked with Stanley and Lawrence, whom he disliked, he disliked me too, and became the chief opponent of my progress in the school.

The lectureship on Midwifery was held by Dr. Conquest, a man of some repute in his time, but without the power of either teaching or managing a class. His unpopularity had at last bred a row, and the students interrupted and bullied him till he was persuaded to resign. Then, for a short time, Dr. (afterwards Sir Charles) Locock gave the lectures, and then Dr. Hugh Ley was appointed. I disliked the whole subject, as it was then taught; and, of all the lectures given in my time, attended only two.

It was not, then, generally thought amiss that one of my teachers told many stories, some of which were obscene, some very nasty; perhaps some thought them fairly balanced by the care with which, in telling the uses of every part and the advantages of every arrangement of parts, he used the methods of the natural theology then popular. His statement of each final cause might generally

have ended with 'This is exactly what I should have done, if I had had the doing of it': but, for teaching, the plan was impressive and the argument seemed satisfactory. Such stories, I believe, are now never told, and the change is among the many I have watched as significant of a vast increase in the habitual decency and, I do not doubt, the real morality of students. I may add, the decency of the profession generally; for though it may seem hardly credible, yet I can only too well remember that some of even the most distinguished members of the profession would commonly tell utterly indecent and dirty stories. The vile habit was not theirs' alone; it was as prevalent among all of the same or higher social rank; and although it had begun to die out, and some kept themselves pure from it, it was pitch from the defilement of which one feels even now not quite cleansed.

These were the teachers from whom I had to learn, and I might have learned from them much more than I did; for I was not a diligent attendant at their lectures. It is hard now to remember what their influence was: but I think it was chiefly that some of them—especially Lawrence, Latham, Stanley, and Burrows—were men of repute for high acquirements and earnest work, who maintained in the school a high standard to which the more industrious of the students might be tempted to attain: it was felt to be something to display and boast of, if one had marks of their favour, for they showed favour to none but those of the

better sorts—the University men, the well-bred, and the industrious.

The mere knowledge which I learned directly from them in my first year was, I think, much less than I learned by reading, and by work in the dissecting-room, the dead-house, and the out-patient-room. I did as much dissecting as I well could, on most days, in the hours then usual—from 10 or 11 to 1.30—reading Stanley's 'Anatomy,' and the 'Dublin Dissector,' which was then an advanced book; and, at home, the translation of Cloquet's 'Anatomy,' which very few then ventured on. I read hard in it, and remember a joke at me, that when there was a fire in the house next door to my rooms, 'Cloquet' was the first thing I seized to save. It was an admirable help towards getting the repute of being the best anatomist of the year in the school. And I think I must have read hard in the other subjects: for I rarely went out in the evening and never went to bed early. Of the books, I remember Turner's 'Chemistry,' which was only too far in advance of Dr. Hue's lectures, and Mayo's 'Physiology,' Cooper's 'Surgical Dictionary,' Lawrence's lectures in the 'Lancet,' the articles in the 'Cyclopædia of Medicine,' Bichat's 'Anatomie Générale,' and (best of all) Hildebrandt's 'Anatomie,' and, as they came out, the parts of Müller's 'Physiologie.'

I say 'best of all,' not only for the value of the books themselves, but because they were the first in which I learned to read German—the first in which I began to acquire that priceless power.

I must record my debt to those who guided me

to this great good; though it be in a too long parenthesis. I had an admirable friend, some years my senior in the school, Dr. Johnstone, a fellow of Caius', an excellent classic and Dr. Hue's first favourite. He died young of typhus, caught while attending a child at the Foundling Hospital; and his monument by Lough, with a touching epitaph by his old Shrewsbury master, Kennedy, is in the Chapel there. Johnstone had spoken of me to Dr. Clarke, the excellent Professor of Anatomy at Cambridge, the predecessor of Humphry; and Clarke had said 'Tell him, whatever he does, to learn German.' So I set to work, and with a dictionary and the two books he recommended, Hildebrandt and Müller, read some every day. I cannot overstate the advantage I thus gained, not only in knowledge but in reputation. Among the medical officers and teachers in the school at that time, Lawrence and Burrows alone knew German —(Owen was hardly to be reckoned among them): among the students, I think that none but Johnstone could read it, and he was scarcely more skilful in it than myself. (Baly and West were then in Berlin.) It would be hard now-a-days for a student to get such a 'swing' as I then did by being able to talk out of Johannes Müller. I could tell Stanley things which he could tell in his lectures as one might now tell the latest and rarest telegraphic messages from some distant field of great research; and I am never likely to forget the being asked by Marshall Hall and Kiernan to call on them that I might translate to them what Müller had just published on the 'reflex function'

and on the structure of the liver. I can half pity the students of the present day, for whom there is no such easy or agreeable way to distinction.

I suppose that in my first winter-session I worked harder than most of the men, but I have no recollection of any distress or any sort of overwork. Probably my evenings were spent more industriously than those of many were; for I very rarely went to dinners or balls or theatres: I had few friends and no spare money; indeed if my brother and I had not lived together I might have been hard pressed. Thus there was plenty of time for reading, and making notes and such sketches as might help my memory.

In 1834 they had adopted at St. Bartholomew's the plan of holding examinations of the several classes for such as were disposed to go-in for the prizes given to those who passed best. The plan had answered; and the examinations were held for the second time in 1835. I went-in for Medicine, Surgery, Chemistry, and Botany; and came out first in all four. I am sure that no one was more astonished than myself: it was my first real competitive examination, and nothing had led me to expect such a result: the surprise was the cause of one of the only two sleepless nights which I have ever had, unless in severe illness.

The consequence of this success on my position in the school was considerable, and its influence on myself was, I think, harmless. At the most it may have increased a belief that I might become connected with the Hospital and be prosperous in

London: but it was not enough to change any plans or anything in the course of my work.

Another event, in this first year's study, which had some influence on my later life, was the discovery of the *Trichina spiralis*. Dr. Cobbold has told the story of the several steps leading to the discovery and following it, in his latest work on the Entozoa. My share was the detection of the 'worm' in its capsule; and I may justly ascribe it to the habit of looking-out, and observing, and wishing to find new things, which I had acquired in my previous studies of botany. All the men in the dissecting-rooms, teachers included, 'saw' the little specks in the muscles: but I believe that I alone 'looked-at' them and 'observed' them: no one trained in natural history could have failed to do so.

The discovery had a memorable consequence, in procuring me an introduction to Robert Brown. I wanted to examine the entozoon with a microscope, and there was none in the Hospital. I thought I might get help from Mr. Children, who was then chief of the Natural History Department of the British Museum, and to whom Mr. Dawson Turner had given me a letter of introduction. He, however, had no microscope; but suggested that 'Robert Brown might help me.' So we went at once to the little room in the Museum in which the great botanist was at work among books and specimens; and I remember Mr. Children's first question, 'Brown, do you know anything about parasitic worms?' and the answer, 'No: thank God.' But he let me look at my specimens with

his little single microscope—the same, I think, that he had done his own grand work with; and I made the sketches of them with which to illustrate the paper read at the Abernethian Society. This was, certainly, the first account given of the new entozoon: but Owen, to whom specimens were taken when I had seen that there was a 'worm,' read a paper on it at the Zoological Society, and gave it its name. It mattered little: the repute of the discovery would have been of no great use to me: and I should have gained less happiness by disputing for it and obtaining it than I have enjoyed in the personal friendship with Owen ever since. It was enough for my advantage that the discovery, and the paper at the Abernethian, strengthened my position in the Hospital.

Thus my first year had passed happily and very prosperously, and I had made many life-long friendships: especially with Square of Plymouth, Firth and Master of Norwich, Langshaw of Lancaster, Meade of Bradford, Barrow of Ryde, Holden, Black, and others; all working gentlemen, helpful through life.

COMMENTARY.

From October to Christmas, 1834, George and James Paget lodged together at 9 Charlotte Street, Bloomsbury. It was James Paget's first sight of London; but he did without the pleasure of sight-seeing; and, it may be, took pride in being too busy for it. Once, when Mendelssohn himself was playing the organ at Christ Church, in Newgate Street, close to the Hospital, he would not leave his work to go and hear him; and, all his life, he never saw the Derby, the Boat-race, or the Lord Mayor's Show. After Christmas, when his brother left London, he moved

from Charlotte Street, and took lodgings with his friend Johnstone at 12 Thavies Inn.

The dissection, that led to his discovery of the *Trichina spiralis*, was made on February 2nd, 1835. On February 6th, he read his paper at the Abernethian Society, before an audience of his fellow-students. On April 16th, he writes to Dr. (Sir William) Hooker :—

My dear Sir,—I was exceedingly annoyed, on the receipt of your last communication, to find how much inconvenience and expense you had been put to by the unlucky circumstance of my having changed my lodgings a month or two after having written to you. Still, I cannot imagine how the mistake could have occurred, for I left my address, with particular directions that everything should be forwarded. I can only imagine that our former Landlord must have left the house and forgotten to leave our address behind him.

Pray thank your son for the plants, among which were several new to me. I feel that my time must for some years be so nearly given up to my *necessary* studies that I shall be but a poor correspondent to him. I am not certain whether the ensuing summer will find me roaming, or at Yarmouth, or here—in any case, he must send me a list of his desiderata (which I have never yet had), and he shall have the best that my labours can afford. He gives me a step in the profession by supposing me in practice. I am still (what I shall probably be for a much longer time) only a student.

I have enclosed a specimen and a drawing (for the coarseness of which the haste in which I am obliged to make up this parcel must be my apology) of a singular animalcule which I discovered in the beginning of the year infesting the bodies of two subjects in our dissecting-rooms. Although not belonging to the part of natural history in which you are most interested, its novelty and extraordinary habitation may perhaps excuse my sending it to you. . . . Of its causes or effects nothing can at present be said. The two subjects in which I have seen it were both very emaciated, and, as far as can be remembered, this was also the case in upwards of twenty others in which the same appearances have been noticed in our dissecting-rooms, where they have been attributed to the deposition of small spicules of bone (which, indeed, they somewhat resemble). They do not, however, seem to produce any remarkable symptoms in the patient appreciable during

life, though we can hardly imagine a single body to afford sustenance to some millions of such creatures, however minute, without some visible effect.

Should any of your medical friends have seen, or hereafter meet with, analogous cases, I should be very glad to hear of them, although my time is too fully occupied with learning the discoveries of others to permit me to give up much of it to any of my own; though I cannot but feel deeply interested in following out this—although perhaps not of much importance—when so little is known of it. Not being well acquainted with the subject, I thought it best that it should be described by some one of more authority than myself, and Mr. Owen, of the College of Surgeons, read a paper on it at the Zoological Society, giving it the name of *Trichina spiralis*; and, since that, another which I had drawn up has been read at the Medico-Chirurgical Society. . . . My brother, who has sent the accompanying box of insects, unites with me in presenting our remembrances to Mrs. Hooker and to all your family, and again apologising for the inconvenience I have caused, and assuring you that I hope for more permanent residence in my present quarters, Allow me to remain yours very faithfully,

JAMES PAGET.

Hilton's observations, that came so near discovery, were published in 1833, in the 'London Medical Gazette.' Professor Owen's memoir is in the Transactions of the Zoological Society, 1835, i. 315. Long afterward, in 1886, the whole story of the discovery was told again in the 'Lancet.'

The *Trichina*, when once it has become encysted in the muscles, undergoes no further change, and gives no clear sign of its presence in them. Its life-history, therefore, had still to be made out; and this was done by Prof. Virchow and others. It infests swine, and is taken into the body by the eating of uncooked ham or pork; and its sudden multiplication and dissemination into the muscles cause intense suffering, high fever, and often death. In Germany, there were many epidemics of this trichina-fever—38 cases in one town, 60 in another, 80 in another; and in Magdeburg, in five years, no less than 300 cases. By simple preventive measures, the sale of infected meat was stopped; people were warned against the danger of eating ham or pork insufficiently cooked; and the disease was stamped out.

IV

HOSPITAL PUPILAGE. SECOND YEAR: 1835-1836.

I DO not remember the occupation of the vacation-time. In the second winter, I gave myself to Hospital practice more than in the first. There was at that time no attempt to teach what were called the principles separately from the practice; and I think it greatly to be regretted that it should now be thought desirable to make the separation even nearly complete. Still, the proportion of the two parts of study was different in the then necessary two years: the first was given chiefly to lectures, the second to practice; and I followed this rule, and have made a similar partition in my memory. In the first year, I had not neglected Hospital practice; but I had done little more than go round the surgical wards, especially with Lawrence, seeing what was rare, talking about cases, sometimes hearing a very few words of teaching. Besides, I had often sat with Burrows in the outpatients' room. But, whether in the first or in the second year, my practical study in the Hospital was very little: far too little, though as good as that of the majority of ordinary students. I did not have a dressership; partly because the dresserships were expensive (10 guineas at least), partly because they seemed to offer scarcely more

opportunities of studying surgery than I had had in my apprenticeship. A house-surgeoncy was far beyond my means. Thus, I became disposed to work in the medical rather than in the surgical wards; and, especially, worked again in the out-patients' room with Burrows, and in the wards with Latham, to whom, for some months, I was a clinical clerk. Their teaching was admirable: not only in telling what one did not know, and showing how to learn, but in their own methods of study, and their expectation of what might be learned by continued research.

There was very little active practical teaching in the wards or by clinical lectures: it was customary to think it sufficient to give opportunities for learning to those who could learn by looking-on and by occasional rather casual talking about the cases. Doubtless it was a grave defect: but it was less then than it would be now, for the great majority of students came to the Hospital after apprenticeships in which, whether in private practice or in provincial hospitals, they had been learning how to learn and had become familiar with the language and habits and apparatus of practice. The result of their study was, I think, to make the average of knowledge among them very nearly equal to that of their successors: equal, *i.e.*, in proportion to the best prevalent knowledge of the time. It may seem that, in this as in many other cases, change cannot be produced in any large class of men unless by so vast a change in the conditions of their mental life as seems utterly disproportionate to its result.

Of the medical officers who were or should have been teachers, I have already written of Dr. Hue. I think that he was a good practitioner in ordinary cases, and it was said that in fevers his wards had least mortality. Probably, he knew best how to treat patients by watching their general condition and so determining his plans, without striving for an exact diagnosis of local changes. It is the hardest kind of knowledge to teach, and he seldom tried to teach it, even to those few who went round with him. I was often with him, but irregularly, for he had no clinical clerks, and his cases were not taken. Perhaps I learnt more from him than I can now recall.

Dr. Latham's teaching was admirable. With feeble health, and often asthmatic, he used to come down at least three times a week at 8 in the morning; and he would make those who went round with him examine for themselves, and would tell and show them how to learn, and have his case-books well kept, and, in short, follow all the methods which I believe are now used by the best clinical teachers. This precision, and the early hours, were too much for the great majority of students: and even Latham was seldom attended by more than some twelve or fourteen of the better working men. But of these I think there were none who did not thoroughly admire him, and imitate him in his mode of study, and very gratefully remember his teaching. Besides, he gave occasional clinical lectures, including those on diseases of the heart, lately re-published by the Sydenham Society. His style was clear, strong

and impressive; his words apt and as if freely selected from a large classic knowledge. He was very pompous; sometimes almost laughably so, especially if he had to speak of general rules relating either to personal conduct or to modes of study; but all this only helped the memory of his hearers.

Dr. Roupell was one of the most amiable, liberal, and pains-taking of men: but he could not teach. Burrows was only assistant physician; and, unless in vacations, had no work in the wards. I have already spoken of his help in the outpatient-room: it was the beginning of a life-long help by good example.

Thus, there was very little of what could be called clinical teaching of medicine, except Dr. Latham's; and thus the main interest and power of the Hospital were surgical. It had been so since Abernethy's early times, probably since Perceval Pott's; the teaching and importance of medicine were made to seem very inferior to those of anatomy and surgery; and the contrast was sustained in many things outside the Hospital.

Of the surgical Hospital-teaching, the main strength was with Lawrence. The Senior Surgeon, Mr. Vincent, was an elderly gentleman, a thorough gentleman, plain, simple-minded, practical, shrewd, and with a good occasional diagnosis 'at sight'; but very shy, timid, hesitating and seldom teaching in more than a few words at a time. He was highly praised by some; and many things could be learned of him, but all were of the smaller sort; bits of useful knowledge, such as he published

late in life in a strangely arid summary of long experience. Lawrence's teaching was in the Hospital less good than in the lecture-room: far less effective than, with his vast power, it might have been; a large class usually followed him and admired him and boasted of him, but many of them did not work. The third surgeon (there were then only three) was Mr. Earle, son of Sir James Earle the nephew of Perceval Pott and editor of his works. He was a very amiable and well-cultivated gentleman, careful, ingenious, inventive (among other things he invented Earle's fracture-bed), always studious and always ready for what was new, looking for new things, new instruments, new beds, new means of cure, and using all things with moderation. For care, gentleness, neatness, and all mechanical and minor surgery, he was an excellent model. And he, alone of the surgeons, occasionally gave a clinical lecture.

The assistant surgeons were Stanley, Lloyd, and Skey: but I do not remember that they had any influence in the practical teaching of the school. The surgical outpatient department was inconsiderable, and I saw nothing of it: they had very few beds permitted to them: and, if they were on duty in vacation-time, the number of students staying-up was even fewer than it is now.

I worked steadily all through the winter, still dissecting as much as I could, and helping in the *post-mortem* examinations whenever I had a chance. I attended but few lectures of any kind; and read a great deal in the long evenings, and talked anatomy and surgery with Firth and

Master, my fellow-lodgers in Hatton Garden. My brother had left London, and it was still useful, as well for economy as for company's sake, not to live alone. I was again successful in the school-examinations; being first in Anatomy and Physiology, Clinical Medicine, and Medical Jurisprudence.

I must, at that time, have had great facility in 'cramming' myself. My success in the other examinations made me think that I might succeed in Medical Jurisprudence, though I had studied it very little. There were either four or five clear days before the examination; so I set myself to read through Beck's 'Medical Jurisprudence,' a thick dull heavy 8vo. I read it, and came out first. Forty-five years afterwards, Sir George Burrows sent me my papers, and they showed that I had fairly learned the book—a 'cram' which I should deem shameful if I had not often had occasion to see that the capacity for 'cram' is a most useful power, essential to the success of many in high station, especially Cabinet ministers, and leading barristers.

At the end of my second winter-session, on the 13th of May, 1836, I passed the College of Surgeons: for which, at that time, only 18 months' study at a London Hospital was required in addition to the 2½ or more years of study elsewhere. The examination was very simple. The ten examiners sat at the outer side of a long curved table. Each in turn, I think, took a candidate; and, when he had finished, others could ask questions. My examiner-in-chief was Mr. Anthony White, of the Westminster Hospital:

his questions were not difficult, and I believed that I brought them to a close by giving an account of the otic ganglion and its nerve-communications, in reply to some enquiry about branches of the fifth nerve. That ganglion was then known to few; and he who knew about it seemed to be thought sure to know all common things. After Mr. White, Sir Astley Cooper asked me some questions, and seemed satisfied, though I did not answer them well; and then I was courteously dismissed; and Sir Astley claimed acquaintance with my father, thought (erroneously) that he had fought him when they were boys together in Yarmouth, and asked me to breakfast.

I stayed a fortnight more in London; and spent the rest of my time, till the following October, at home.

COMMENTARY.

Other events of this time are told in a letter from James Paget to George Paget at Cambridge. It is dated 12 Thavies Inn, January 10th, 1836:—

I thank you for the volume of Meckel you sent me. In unprofitable return, you have here your Paris and Cooper—the former, by Johnstone's running loudly-thought commentary, appears particularly delectable reading. I wish you would see if Hildebrandt's 'Anatomy' has been taken out of the library, and, if not, prevent it by taking out one volume. I do not want more, for until you take your License you probably have your full number out for yourself; but really the surgical anatomy one has to get up is so dreadfully heavy that it requires something more refined to keep one even moderately in spirits. I shall be especially glad when the weary work of the next four months is over. If, after your examination, you could let me have the four volumes of that book, taking back Meckel, it would be a source of real consolation in my solitude. Johnstone would be particularly glad if, at any opportunity of

sending it free, you could let him have his Stanley's Manual; for I tell him I could sell it for him at cost price, and he says he should love no money better.

We have now three *excellent* cases of fever; wine and broth in the discretion of the sisters seem the grand resources. By the bye, your friend Sister Mary is a worse nuisance every day; between her and the active new apothecary, stimulated to additional activity by the new regulations, my place in that ward is nearly a sinecure. He tosses about his *Venæsectiones ad ℥xviii.* and his *Hirudines xviii.* in the most terrific profusion whenever he is sent for, and strange to say he cures the patients. The ward-books hardly know themselves, the *Mistura Cascarillæ* bottle stopper sticks from disuse, and *Emplastrum Lyttæ* is never mentioned. We have just now a most interesting case of aneurism, and another of inflammation of the spinal chord. . . . Indeed, I never remember so many severe cases in the Hospital at once before. Its politics remain the same. Lawrence's course of dinners is now neck and neck with his lectures. I have not attended either this season. He is employing a new mode of invitation, giving Smith a list of about twenty or more names, from which he is to fill up a dozen for each Tuesday and Saturday. Such an one as this will be more honoured in the breach than in the observance. But this is surpassed by a Doctor Copland at the Middlesex, who *puts up a notice*, inviting the pupils *en masse* to a *conversatione* (that's the way it is spelt), in English I believe it means cigars and brandy-and-water. 'And yet,' as Dr. Hue says, 'you are always talking of the respectability of your profession.' He is richer than ever. 'Really,' he says, 'this is very comfortable—I'm not at all wanted in the wards—and you know I'm not fond of the trouble of coming to them.'

Sir Charles Bell is probably going to Edinburgh to take the Anatomical Lectureship there very soon. It's a pity I think for Budd, who moreover is rather unsettled again—his lodgings are not very comfortable, he says—in short, he's fit only for a wife and family. Jones is not yet back, and has sent for more money. He has just completed the reading of Bacon, Locke, Reid, Dugald Stewart, and Berkeley—he'll be intolerable. The Hospital society is now remarkably dull, and with my *Stanleyish Anatomy* I should petrify, but for Johnstone's evening work—we do no end of minute anatomy, and it is daily more and more interesting. I would not but have commenced German for any consideration. I shall sadly miss him

when he leaves, I could not imagine a more desirable companion out of one's own family. He begs to be remembered. He can get no very clear information about the College, but is inclined to think the New University will be nothing.

Lawrence has actually lost another Box-carrier, poor Egerton. He washed the instruments, with a cut finger, after they had been used on a case of peritonitis; in two days, the absorbents swelled, and he died in about three more. . . . Do, if possible, let me have the *Anatomie des Menschen*, Hildebrandt's. Yours affectionately,

JAMES PAGET.

Early in 1836, he left Thavies Inn, and took lodgings with his friends Firth and Master at 82 Hatton Garden. It was here that they had the alarm of fire next door, as he tells in his Memoirs, and he took his Cloquet (Knox's translation) as the one thing that must be saved. He got the French text of Cloquet, with the volume of plates, among his prizes this year; also Harvey's Works, Christison on Poisons, Beck's Medical Jurisprudence, and Burrows's Commentaries.[1] His father came up to London for the prize-giving, and wrote home to Mrs. Paget:—

82 *Hatton Garden, May* 11*th*, 1836.—My dear Bess,—I am just returned from the Hospital with dear James, and I am most amply repaid for my journey if nothing else comes of it. Nothing could exceed the unequivocal testimony from all the physicians, also Mr. Lawrence, Mr. Earle, & Mr. Stanley, and, indeed, every one to me *personally* as to his abilities—his industry and his private worth, and I do really believe they would, if they could or can, give him something. Mr. Earle, in particular, said something must be found, the Hospital ought not to lose sight of him; and I myself can see plainly it would also be a popular thing as an encouragement to future students to exert themselves. He was immensely cheered, I assure you, on taking his Prizes—the Hall was very full with Ladies, Gentlemen, and Students. It is indeed most gratifying to all of us, and most creditable to him—all my fear is the expense, if he is to follow these schools. Where am I to find the money? for it must be a further great outlay, till they could give him (if they are sincere) something. On the other hand, he must,

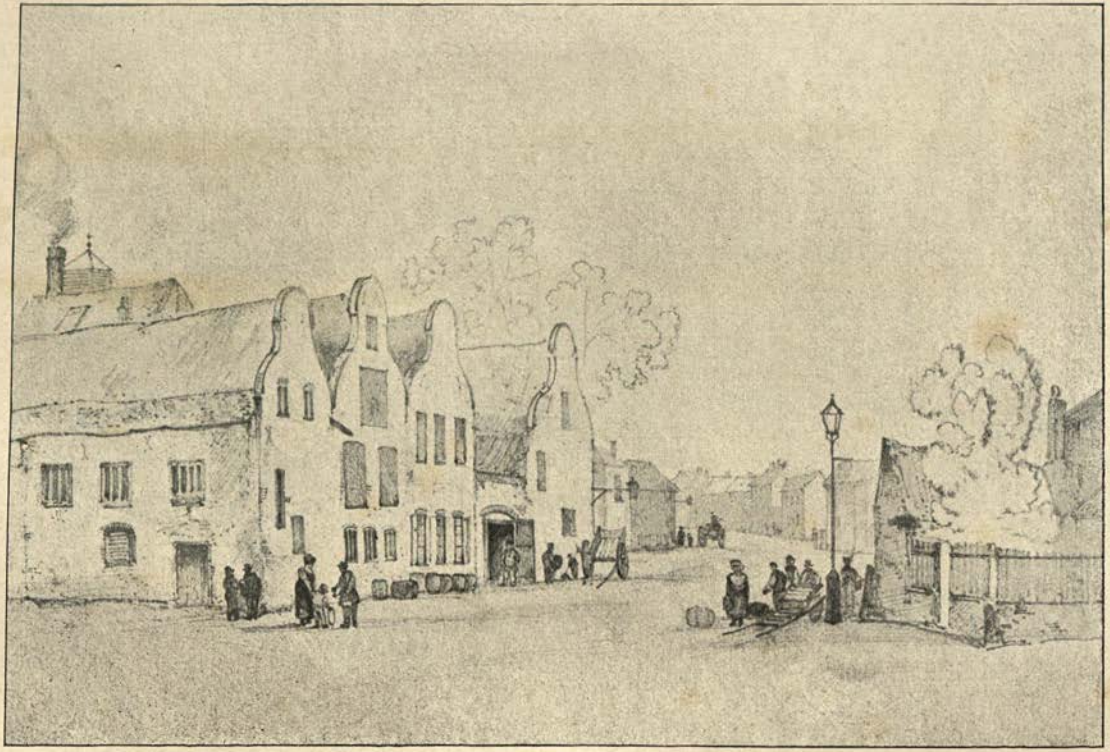
[1] The year before, he had received as prizes Berzelius's Treatise on Chemistry, Baillie's Morbid Anatomy, and a magnificent edition of Humboldt's Plantæ Æquinoctiales.

if he could take the chance and remain here, in time do infinitely better than he could expect to do in the country. . . .

I received most polite attention from a great many, & an invitation from Ald[n] Lucas, Mr. Lawrence, &c., to the Dinner, and shall go there at 5 o'clock, and shall not be backward if an Opportunity offers to urge his claims on the Hospital, because we have seen that civility costs nothing.

Two days later, he passed his examination at the College of Surgeons. There was, at this time, only one examination for the Membership; and the Fellowship had not yet been instituted. The story of Sir Astley Cooper, that he tells in his Memoirs, refers to the time when Sir Astley's father, Dr. Cooper, was rector of Yarmouth. The family-chronicles say nothing about his student-life in London; except that he sent home, in November 1835, a hamper full of small gifts to his people. He did not attend the practice or the lectures of any Hospital but his own; but he heard one of Sir Charles Bell's famous lectures at the Middlesex Hospital. Mr. Barrow, of Ryde, who was a student with him, writes 'He was front and foremost, and we all looked upon him as the future Head of the Hospital. Never otherwise than modest because he was first, always considerate towards his less fortunate competitors'—and he tells the following story of him, 'In the old days, there was a right of way through the Hospital Square; and among those who used it were the old-clothes-men from Cloth Fair, whom some of the students used to bully as they passed. One day, a ruffianly student took an old Jew by the beard, and twisted him round. Paget was in the Square, and he flared up; I never saw him in such a rage. He gave the man such a *jobation*; I thought he would have knocked him down.'

Mr. Luther Holden writes, of the 1835 prize-giving, 'When Paget's name was called, he walked up to the Chair, and received from Mr. Lawrence the first prize in Surgery. The students gave him such a cheer that there could be no doubt about the popularity of the prizeman. When he was called-up again and again to receive his prizes, the applause of the students was really overwhelming. Paget himself seemed, nay, was quite overcome. Everyone was asking, "Who is this man? Where does he come from?"—and no wonder.'



THE OLD BREWERY, YARMOUTH

(From a Pencil Sketch by Charles Paget. Photographed by Mr. James Hyatt)

V

WAITING-TIME, 1836–1843.

With the Membership of the College, and legal fitness for practice, there came soon the question as to what I should do and where and how should try to live. And this had to be soon decided; for there was no money to spare, no promise of any likely to come-in. I had done, as my father thought, so well in the school that a partnership with one of the surgeons in Yarmouth—the dullest of them all was meant—might be bought for very little. Or, I might try my chance of living in London, waiting and watching for 'something' to 'turn up.' Of course I inclined to this; but not, so far as I can remember, with any great determination or any clear plan: and after four months' vacation at home, I drifted rather than sailed or steered back to London in October, 1836. It was hard to settle what to do for the best, and nothing was settled; there was a kind of understanding that I should maintain myself, if I could; and that, if I could not, my father would send me, if he could, ten pounds a month; and that this might be tried for some six or more months.

I had hardly started on this plan before I became engaged to be married. It would have

been difficult to do anything not immoral which could have seemed to any reasonable person more imprudent; and it is not to be pretended that wisdom, discretion, forethought, or any method of sound judgment, had anything to do with it; I had been for nearly two years falling in love and now suddenly confessed it and was believed trustworthy. The indiscretion was the happiest event of my life: the beginning of an engagement which for nearly eight years gave me help and hope enough to make even the heaviest work seem light, and then ended in a marriage blest with constancy of perfect mutual love not once disturbed. No human wisdom could have devised a step so wise as was this rash engagement.

I cannot be chronological in my account of the events of the seven years which passed while I was waiting for an appointment from which I might rise to the Hospital-staff. I remember the events better in their relation to the means of living, and the places that I held.

Of course, I took some pupils; and first, one who boarded with me in my lodgings in Millman Street, and paid me £10 a month. He was a quiet gentlemanly fellow; but he could not work; he was not in any way dissolute or idle: but he could not work even with persuasion and help; and, in four months, I got so tired of seeing him do nothing that, to escape this annoyance, I dismissed myself from him, and persuaded my father to let me have my £10 a month and go for three months to Paris.

Few greater contrasts could be found between

that time and this than were in the way from London to Paris. The Channel was crossed in a shabby little boat, and by night; then came the tedious journey by *diligence* from Calais to Paris—where I arrived very early in the morning, and went to Meurice's Hotel, where I slept for a few hours, and then went to find lodgings. I soon found some in the Hôtel Corneille, near the Odéon theatre, in the Quartier des Étudiants—*au troisième*, in such a single small room poorly furnished as was then used for quiet students. The room itself was clean enough; very clean, considering its rent was 60 francs a month; but the passages and corridors of the Hotel were filthy beyond description. I lived too quietly to learn anything worth telling of French society, either good or bad; and I knew no considerable personages there: but there were a few other St. Bartholomew's men, with whom I wasted time pleasantly and not very mischievously. I saw and heard Roux, and Lisfranc, Cloquet, and Velpeau, Magendie, Andral, Broussais, Louis, Chomel, and many more; as well as Thiers, and Guizot, and Molé, and others in the Chamber of Deputies; and Mlle. Mars; and Père Lacordaire: but unless it were in some fresh stir and enterprize and thinking on contrasts, I do not know that any great good was gained in Paris. But I got, at least, a much wider range of thinking, and more interest in the different modes of study.

Returning in April, 1837, I again took pupils, not to live with me, but to read for the College or for the Hospital-examinations. But I had very

few; not more than some eight or ten altogether in three or four following years. I had no skill in that kind of teaching, and was very soon impatient of it: I could not have lived by it or in it.

Writing was a pleasanter occupation and more profitable, though very hard to live by. Still, it nearly sufficed for this: and after my return from Paris, I received only a few pounds from my father. He would have grudged nothing for me: but he had less than he needed to keep himself afloat and to maintain his home; his debts were increasing, and I soon had to take part in borrowing for him.

My first employment in writing was on the staff of the Medical Gazette—the predecessor of the Medical Times & Gazette—to which I was a sub-editor for nearly five years, from 1837 to 1842, in succession, I think, to Dr. Cummings, of the Aldersgate Street School of Medicine. It was then published by Longmans: its chief editor was Dr. Roderick Macleod, of St. George's, and the chief writer, except in my last year, was Dr. Domeier. They were both thorough-going editors, good and pleasant to work with. It was, as it always had been, a completely respectable and rather dull journal, maintaining the tone with which it had been started in opposition to and contrast with the Lancet; which was then only beginning the departure, now long completed, from its old virulence. I used to write a leading article every two or three weeks, sometimes more often: and have been amused, after 40 or more years, to find them generally discreet, not lively or clever, very rarely

political, chiefly on questions of medical education, on scientific progress, discoveries, and the like. But my chief work was with reports of lectures, reviews, and translations from French and German —and from Dutch, which I learned to read at the instigation of Vrolik and van der Hoeven, good friends whom I had been introduced to.

I used to earn from this work from £50 to £70 a year; and I have always been glad to have known the work of a journalist, and to remember how much less it is either influential or contemptible than those are apt to think who know nothing of it. It is good to know the kind of men that are reviewers; good to be able to estimate fairly, in after-life, the weight of their praise or blame; and to be quite sure that this weight is never great. And there is a use in being required, sometimes, to write off-hand about something half-known: it helps to give an ability which, like that for being crammed, is very valuable, provided only it be rarely exercised and kept rigidly under restraint. There is use, too, in learning to report from memory, as, for about two years, I reported the debates at the Medico-Chirurgical Society; not by taking notes, but by listening attentively and writing-down at home the chief things said. I can clearly trace some of my facility in the work of after-life to the having been on the staff of a journal.

Other journalist-work was with Dr. (afterwards Sir John) Forbes in his Quarterly Review. It was heavier and more serious work; for the books had to be well read and very carefully analysed, and

the best papers were to be translated. It was an excellent occupation and did me great good; especially when I wrote the Annual Reports on the Progress of Anatomy and Physiology. Very few, I think, read them: indeed, such Reports seem to be always intolerably dull reading: but I gained from them a repute which was of the greatest help towards my getting the Lectureship at St. Bartholomew's, and the being fit for it. For it was necessary to read what is commonly understood as 'everything' on the subjects. And indeed it is interesting to think that one person could at that time, some forty years ago, read 'everything' published on Anatomy and Physiology, including all the journals in French, German, and Italian, that were sent in exchange for the Review, or that I could find at the College or the Medico-Chirurgical Society. As I look at the heaps of Journals that now lie on the tables in those Libraries, I can believe that they would need at least four readers & writers all working as hard as I did.

In another way, and much more indirectly, my association with Sir John Forbes helped me. He was Sir James Clark's oldest and most intimate friend: and I am sure that he gave a good report of my work and working-power, such as led towards the appointment of Surgeon Extraordinary to the Queen, which was conferred on me long before what might have been deemed my time.

When first offering to Dr. Forbes to contribute to his Review, I wrote that I should be ready to translate papers from the French, German, or Dutch; and it struck me that it might be as well

to add Italian, though I knew nothing about it. In answer there came a great packet of Journals, the majority of which were Italian; so this had to be learned and added to the languages in which I might read medical science. My ability hardly went beyond that science, and some newspapers.

I have forgotten what I wrote for these Journals almost as completely as any who may have read them: but the necessity of writing was very useful. It encouraged various and hard reading and careful analysis and clear expression; and I am not aware of any harm from it. Writing was not to be my profession, and it was prudent to conceal the extent to which I was engaged in it; so I never became proud of the calling or thought of it as influential or of myself as a guide of opinion.

Besides these Journals, I wrote for the Penny Cyclopædia and the Biographical Dictionary, published by the then very important Society for the Diffusion of Useful Knowledge. In the former, I wrote nearly all the articles relating to human anatomy and physiology and surgery from 'Gunshot Wounds' onwards: in the latter, a great part of the biographies of the men most distinguished in these sciences. The writers for both these works (and they included many of the best of the time) had the advantage of working under a remarkably good editor, George Long. His own proper range was in classics, and ancient law: but he had in a high degree that singular power of widely-ranging good editors which enables them to detect errors or doubtful points in essays on subjects of which they know, of their own

study, little or nothing. Nothing written lightly or carelessly ever seemed to escape him. It was for me an excellent exercise in accuracy—and in writing biographies—though the Dictionary came to an end at the close of letter A, in its 7th volume, and was said to have finally exhausted both the patience and the funds of the Society. The work was in an entirely new field, and had to be done in what was to me a nearly new manner—with the reading of old books, and the searching everywhere in old journals and the Transactions of old Societies, and tracking my way for references anywhere, so as to have at least a nearly complete list of every considerable writer's works. I had, before this, known very little of the history of medicine: I ended with knowing not much more, but with a clear impression of the immense difficulty of writing an accurate and nearly complete history of any time or science; and with a thorough disregard for all histories written lightly or prettily. Besides, I learnt more than ever the value or necessity of always referring, if possible, to the very book, volume, and page quoted from, or from which any statement is made, and the similar necessity of verifying every reference made from another. Nothing could better teach the difficulty, necessity, and rarity of accuracy in writing than did this work in biography.

All this reading and writing, whether in my rooms or in the Libraries of the British Museum and the College of Surgeons, cost me many hours a day; I cannot remember or guess an average. I was at times very poor; but I lived plainly and

quietly, and especially ate and drank simply whether at home or in decent chop-houses; and, with some measure of respect for the discipline of fasting, which was then being revived among Churchmen, I went without dinner on Fridays and learned the value of dates and raisins for averting hunger. I lived indeed so quietly in these years that I can remember anxiety, and almost fear of coming evil, if in the evening unusual footsteps approached my room. Work generally went on till 1 or 2 in the morning: and I was seldom away on more than one evening in the week, and then made up for the time of recreation by sitting-up till 3.

It was during these seven years, 1837 to 1843, that I was Curator of the Museum, succeeding Baynton, of whom I have already written. The work of the place was hard, and some of it rather menial. In most of the years, I had to be at the Museum from 9 to 4 on every day but Saturday; and to put-up all new specimens, and keep in order all the old ones, and to take care that Stanley had, in their due places, all the illustrations that he needed for his lectures—diagrams, preparations, and the rest. And sketches had to be made for him; hideous, rectilinear things, enough to spoil one's eyes. Besides, I had to manage all things connected with the supply of subjects for dissection, and to put-up all notices of lectures, and see to the printing of the Students' Guide-book, and many other pieces of job-work.

Such things would not be worth telling unless

for the chance that some one may read of them who may think it hopeless or unwise to begin a professional life in an occupation such as this, or may think that from 9 to 4 is enough for a fair day's work. Probably I would not have taken the place but for the need of money. I had at first £100 a year for it: but, after the first year, only £40 (I forget the reason for the reduction). If I could easily have chosen my course, my choice would probably have led me along some way less useful than my necessities did: for, with all its defects and all the occasional utter weariness of the occupation, the Curatorship led straight to better things. It made me a thorough student of changes from disease; thus it led to the Demonstratorship of Morbid Anatomy, my first office in the School. It made me familiar with all the common clerical work of the entering of students, and the like; and so it made me fitter to be Warden of the Hospital-College, with the general charge of the School-affairs. It gave me the reason and the means for writing a new edition of the catalogue of the Museum; and this led towards my being employed to write the Pathological Catalogue of the College of Surgeons Museum, which led to the College-Professorship, which led to more than I can tell-of. Thus it was very useful: but it had grave defects. It almost completely shut me off from practice; and, though I did something to repair this loss when I became Surgeon to the Finsbury Dispensary in 1841, yet it was a serious harm that, during these years, I was hardly ever in a Hospital-ward or could in

any fair sense learn the work of a Hospital-Surgeon. The defect was the more grave, because of my previously defective Hospital-education: but it was unavoidable: I had to live, and to wait till I could be free for better work.

I might have waited very long if my income had depended on practice. My name was on a door, at 3 Serle Street, Lincoln's Inn, where I had the first floor over the Wig-maker's shop, with a front-room, decently furnished, and a back-room furnished with only a turn-up bedstead and a washing-stand. One room was sufficient for the practice, which was, on an average, £13 or £14 a year; and I never had two patients at a time; and visitors were so rare that a furnished waiting-room was quite unnecessary.

It is hard to remember events in a life so monotonous as this was. Every day, for nearly seven years, seems to have been passed in reading, writing, and Museum-work: with very rare amusements, rare and short vacations, and but few indications of coming changes for the better.

In the first three months of 1839, the monotony was disturbed by a severe attack of typhus, caught in a poor house in Lambeth where I was examining, with Havers, the body of a woman whose child lay ill with the fever in the next room. I was terribly ill, but with the wise guidance of Dr. Latham and Dr. Burrows, and with kindly nursing, recovered unharmed.

In the summer of 1839, I succeeded to the Demonstratorship of Morbid Anatomy: but the office was at that time scarcely recognized; its

duties were only those of making the medical *post-mortem* examinations; it was not intended to be connected with teaching. But it led to this; for in November, 1839, many of the students of their own accord sent a letter to the Medical Officers, asking or urging that I should be appointed to lecture on Morbid Anatomy (Carswell was doing so at University College). There was, I believe, much opposition: it must have seemed so obviously a thin end of a wedge: for my intention, at this time, to work my way if I could into better places in the School, was well known. After long delay, it was granted that I might give demonstrations in the Pathological Theatre. The present building, palatial in comparison with the former dead-house, had been lately built; and it gave convenient standing-room for the students who were content to stand while, once a week in the summer-session, I lectured for an hour. In June, 1840, a further indulgence was granted, and I was allowed to give the demonstrations in the Anatomical Theatre.

These were the first lectures that I ever gave; and they were well attended, though they were neither compulsory nor paid-for. They gave me the best possible opportunity for practice in lecturing; for I adopted the plan, then not usual, of lecturing on the specimens obtained in *post-mortem* examinations of the day or few days before, neglecting all attempts at systematic teaching, and describing or explaining little more than could be shown to the naked eye or be touched. I have no doubt that this is the best plan of teaching pathological anatomy to students; certainly it was

the best for me; for there was not time enough for either learning the lectures or so writing them that they might be in part or wholly read. I was compelled to speak extemporaneously, unless, it might be, in some chief sentences which could be learned by heart. I never had difficulty in thus speaking; but the practice, and the repute which some success in it gave me, were of immense value; the more, probably, because the lectures were popular with the students and of some use, perhaps, in checking the decline of the school and in making my superiors think that I deserved something more lucrative—though, indeed, I still feel well enough repaid by the possession of a handsome silver tea-service, and a largely-signed address, and by the memory of the very good dinner at which these were presented.

During these years, from 1837 to 1843, the school was, I believe, steadily declining in numbers and, probably, it was felt that some change was advisable. I do not remember, and probably never heard, the discussions that took place; but to my delight, in 1841, Mr. Stanley told me that I was to be Demonstrator of Anatomy, and to give the demonstrations with McWhinnie. Wormald had resigned; his salary (for Demonstrators were then appointed and paid by the Lecturer on Anatomy) had become more than the entrance-fees for the demonstrations would fairly supply; and he and Stanley had quarrelled. I was to have £100 a year; my fortune seemed made: I could soon have married, and all looked like the very event

that I had longed-for: but bitter disappointment was at hand.

The Demonstratorship was regarded as on the sure road to the Assistant-Surgeoncy; indeed, the last step on the road: and to have put me there would have been to deny or over-rule the claims of all the Hospital-apprentices. This class does not now, I think, exist anywhere. They were articled pupils of the Surgeons or Assistant-Surgeons; and the apprenticeship was in some way registered at the College of Surgeons, and gave right to the use of the Library and Museum. The usual fee paid was 500 guineas for the four or five years' pupilage, or for a resident pupil 1000 guineas; these fees included the cost of lectures, Hospital practice, and dressership; and the apprentices were regarded as having first claim, if not exclusive claim, to all surgical appointments in the Hospital. There was, I believe, no other ground for the claim than a custom long or generally observed. It had been invaded in the election of Mr. Lloyd, then Senior Assistant-Surgeon, who had great influence among the Governors: but it seemed to be thought that his election was an evidence of the excellence of the custom which it disturbed. At any rate, the right, founded on the custom, was to be upheld now, if ever. There were 19 past and present apprentices without appointments, and some of them were very good men: and the seniors among them, though not ready to teach anatomy, were ready, and some of them were fit, to become Assistant-Surgeons. So, there was a row and a protest and a meeting of Governors, at which I

believe that the rights of the apprentices were chiefly maintained by the leading City-liberal, a speaker against all monopolies but that by which his apprenticed son might have gained advantage. The end was that Wormald was induced to withdraw his resignation; Stanley made me as kind excuses as he could; and I went back to my old work, utterly disappointed and with diminished hopes of progress; for, though there had not been a clear admission of the rights of the apprentices, it had been made certain that they would be upheld by those who were much stronger than I was ever likely to become.

The institution of Hospital-apprenticeships, as one now looks back at it, may seem utterly indefensible. It certainly did harm, and a harm which was increasing; but there was more to be said for it than now seems evident or would now be reasonable. The apprentices had four years of as complete Hospital-education as was then possible; they were under the guidance of Hospital-surgeons who were at least able to teach them well: and they were generally sons of those who were rich enough to make their education in every way complete. The ordinary students usually spent only a year and a half at the Hospital (there were, I think, no provincial schools for previous study); their work during country apprenticeship was often not good; and at the Hospital they were under no one's guidance. So far, therefore, as education might be taken as a guarantee of fitness for duty, the claim of Hospital-apprentices was very strong; and the distinction of the existing surgical staff could be

cited as evidence that the system had worked fairly well. But times were changing: reform was very popular, monopolies were becoming hateful, and the system had been overworked: there were 19 apprentices, and some of the eldest, who should have had first claim, were idle men; the school was steadily diminishing, and the custom of open elections at some of the other schools was attractive and working well. The system could not last much longer.

It was by necessity as well as by choice that I waited at St. Bartholomew's. Somewhere about this time, I might have been elected to some good position at the Middlesex: but Dr. (Sir Thomas) Watson advised me not to be a candidate. Thus my work went on; but, towards the end of this period, in less monotony.

In 1842, I began to write the Pathological Catalogue of the College of Surgeons Museum. The task was much more than that of mere descriptive writing. It involved the rearrangement of the collection, and the inclusion of specimens selected and purchased from the private museums of Langstaffe, Liston, and others, and the reading of Hunter's printed works and manuscripts and of Home's and any other books in which there was a chance of finding illustrations of any of the preparations. It certainly was very laborious work, and occupied some hours daily for seven years; and it might have been intolerable to one who had not had a long training in collecting, arranging, and cataloguing, and, by nature or through habit, some feeling like a love

of index-making. This feeling I am sure I had: it was much rarer then than it seems to be now, when there can be found even associations of good men who are thus, as librarians, chiefly occupied.

I can look back at this work of catalogue-making with great gladness. It made my election to the College-Professorship reasonable, though some members of the Council wished to have it; and it required a method of writing which is excellent for education in accuracy—an education terribly neglected. I described every specimen as I saw it standing or lying before me; nothing was to be told but what could be then and there seen; nothing that could be only imagined or remembered; there was to be mere translation from eyes to hand. And I venture to say that in tasks of scientific description no other method than this, where it is possible, should be trusted. Most artists know the contrast between a picture drawn from memory or imagination, and one from nature; so should scientific writers; nay, so should all writers, for oh! the lies, the controversies, the evil-speakings, the hindrances to truth that spring from the inaccuracies of those who believe themselves honest and well-meaning. Imprisonment with hard labour in catalogue-making might well befit them.

Besides the College-catalogue, and the catalogue of the Hospital-museum, and the various articles for journals and other books, and several papers, I wrote what promised to be the beginning of a full-sized book on General Anatomy; finding

materials for it in what had to be read for the Annual Reports, and in book after book to which they guided me; I worked also with the microscope which about this time had been provided for the Hospital-museum; but the main point seemed to be to read 'everything' and imitate the first volume of Hildebrandt with its abundant footnotes. So, when the portion on the skin and its appendages was complete, I offered the manuscript to Messrs. Longman as a specimen of what should be a book if they would publish it. They took some days to consider and to consult their usual adviser on such matters, and then politely declined. It was a bitter disappointment; nearly as bad as the loss of the Demonstratorship; hours upon hours seemed to have been wasted, a rare opportunity for distinction was lost; but it could not be helped, and the waste was not great: for nearly all that was written came-in usefully for my Lectures.

Looking back over these years of long waiting, the sight seems dreary. There was very little of what is commonly thought to be pleasure in them: very little besides that of my engagement, which was so happy that there seemed no need of patience. And there was what is commonly thought to be poverty. An average of £170 a year was not much with which to pay 50 guineas a year for rent, and to appear like a gentleman, though it might be a scientific one, and to eat and drink enough to work hard, and to buy clothes and books and pens and ink; not much for one who

would even pretend to be in practice. My father was becoming constantly poorer, and it was necessary for me to borrow money in order to meet some of his liabilities, and occasionally I had to go to two of his London creditors and ask for time for payment of bills already due. Nothing but what might be called thoughtlessness—a happy state of mind which, to many who are healthy and rather over-worked, is better than patience—would have held me in my place. But this and, I suppose, a rather strong will and natural dislike of change, sufficed.

It might have been considered, but it was not, that this manner of life was an excellent education for everything but the practice of my profession. For that purpose, it certainly was very defective; in all the six years, I saw scarcely any Hospital cases, did not study one till it was in the dead-house, have not a note of one; and the study of Surgery in a small Dispensary was very limited, not enough to lead me away from the constant reading and writing on Physiology and Pathology in which I spent the time that was not occupied in Museums. My course, in so far as the acquirement of knowledge was concerned, would have been as good as possible for one who did not intend to practise: but it was not bad for one who did, and for whom, as it happened, there would be a long later period in which to acquire gradually his practical ability. And there were many things to come in after-life, for which these dull years were an excellent preparation. To say nothing of the long courses of study of the scientific

foundations of surgery, these years gave good means for learning patience, readiness to work with colleagues, willingness and ability for official- and routine-work; they compelled to habits of order and punctuality; they compelled me to work so hard and wait so long for a return that nothing in after-life could seem laborious, and that which some call the monotony of practice could often seem full of variety.

Besides, as the event showed, that which ended the delay was better than anything that might have come in less time.

COMMENTARY.

Millman Street, October to December, 1836.

When Paget came back to London after his summer holiday at Yarmouth he took rooms at 2 Millman Street, Bedford Row. The neighbourhood of Bedford Row, where Abernethy had lived, was not unfavourable to surgical practice; and he was close to the Hospital and to the College of Surgeons.

On October 9th he became engaged to Miss Lydia North, the youngest daughter of the Rev. Henry North—a grave, well-read, rather severe old gentleman, a lover of music, and a good classical scholar. Two of Mr. North's sons were curates at Yarmouth Church, and were friends of the younger members of Samuel Paget's family. The friendship thus begun in Yarmouth was kept up in London: and in November, 1834, young Mr. Paget had dined with young Mr. North's people; they were living then at 1 Cornwall Terrace, Regent's Park. Later, he used to go there on Sundays for a pleasant refuge from the loneliness of lodgings.

The news of his engagement got no welcome at Yarmouth; and his father wrote some very forcible letters about it to one or other of the family—'It is devilish hard to tell a stranger that you are a poor man yourself, and that your son has nothing whatever till he can earn

it by his profession.' He urged upon his son the wisdom of starting practice at once in Yarmouth:—

Yarmouth. November 23rd, 1836.—My dear James—As I understand an opportunity will offer to-day of sending a letter without the expense of Postage, I avail myself of it, in consequence of a little incident which has occurred to bring into my thoughts where you are to set yourself down after the season in London is over; and so much did it fasten itself upon my mind, when once I began to think about it, that I determined to write you, as I had a leisure half-hour this morning. The incident, as I call it, is certainly trifling enough—being no more than that of Messrs. Reynolds & Palmer having hired Offices on the South side of the New Street, and their old ones being to let, I understand, from next Christmas. Now, altho' there are Houses enough to obtain, if your domicile is to be Yarmouth—and of which I am of course aware—still this is not a bad situation for a medical man, and moderate also in Rent, & therefore as you will perceive not unlikely to bring thoughts & views respecting you into action, & to induce an enquiry or consideration, how we stand since we parted in Septr last. I fear we shall be obliged both of us to answer, without any better prospects as regards the Hospital or London generally. I take it for granted, as you have never mentioned it, that not a sentence of even hope has been held out, by the leading men on the Establishment, of finding anything for you. . . . Is it not prudent for us to ask each other again, what shall we do—persevere with such uncheering prospect before us, or determine to try Yarmouth? I mean, say, at the end of the season, or from about Lady-day next year.

Then came the chance of the Curatorship of the Hospital-museum; not a great thing, but it might lead to something better; and Samuel Paget writes again in a more kindly tone: 'After all the thought which the few hours given will allow, I am disposed to think, and so is your mother and Charles, that it is proper you should accept the offer of the Curatorship, coupled as it is proposed with the appointment of Demonstrator of Morbid Anatomy.'

But the staff, though they were willing that he should have the Curatorship, would not grant his request that a Demonstratorship should be coupled with it. First, he asked that he should be' Curator of the Museum and Assistant Demonstrator of Anatomy; then, that he should

be Curator and Demonstrator of Morbid Anatomy. It could not be done; he must be content to take the Curatorship alone—that or nothing. Here, in December, 1836, came the parting of the ways; and he made his choice, to hold on in London—'God only knows the end,' he writes in 1838; 'I have chosen a heavy and uncertain life.'

The following letters to George Paget tell the whole story of these negotiations over the Curatorship. There is no mention in them of his engagement; he would not write of it to those who had not welcomed it, and it was left to the test of time.

1. *Nov. 5th*, 1836.—I send you a few of your books which I had here. I retain the bones which you left, and some other *few* books. The former I should require, if I get a pupil or two; and I cannot yet afford to buy any—besides, I presume you are beyond bones now. . . . I have nearly finished my translation of Burdach for Stanley. As I hope to have further and more profitable employment from and with him, I shall not dare to ask for so much as your calculation would make my labour worth. He is very anxious that I should be at work about something in my own name; Burrows, too, strongly recommends it. I thought, as I before mentioned to you, of translating Hildebrandt's *Anatomie*: but on looking at it I do not much think that would be advisable. Johnstone suggests to write a physiology—a compilation from all the best works on the subject that I could get—as Müller, Tiedemann, Hildebrandt, Magendie, etc. Stanley thinks *very* well of this; and I have a great mind to see what I could do in it—you know a book of the kind for *Students* is very much needed; there is not yet at all a good one accessible to them except Alison's, and that is too short. Supposing I could do it decently, I think the reputation that would be attained by it would *in any event* be very useful.

2. *Nov. 16th.*—In the almost daily conversations which I have been having lately with Mr. Stanley, and the various plans which he associates me with himself in, I find very clearly that he would deem it an advantage to have me by him in the School. This morning, after taking 7 guineas of him for my translation, I suggested an arrangement which I had, with Johnstone, been considering. The Curatorship of the Museum will, you know, be vacant in the spring by Baynton's resignation. He has at present been able to find no substitute, though I have reason to think he thought of offering it to me.

I said this morning that I would undertake it on these terms—that I should be *called* 'Assistant Demonstrator of Anatomy and Curator of the Museum,' and that I should have a man under me. . . . The only thing which appeared to be objectionable to Mr. Stanley was the *name*—he would not like another Demonstrator—the two things seemed not exactly compatible. However, I said that on this point I would not recede an inch—that it or something analogous was a *sine quâ non*—for that I had no notion of being merely a curator, which if I began with I should be all my life—and that I would only take it with a prospect and as a means of advancing either in the School or elsewhere.

You will see the necessity of being firm in the *name* of the place. I shall almost necessarily, if they grant that point, succeed to the Demonstratorship of Anatomy whenever vacant, and then my road is before me. As regards the respectability of 'Curator' under any circumstances, I may remind you that it is a place which has no definite rank whatever, but is entirely dependent for that on the person who holds it. While Dr. Hodgkin is in that office at Guy's, and Owen and Clift at the College, there would be scarcely a degradation in it, even if it were the only title. However, as the office is not in that esteem at present at St. Barth's, I would not on any terms take it alone, even though the other appointment were little more than nominal.

3. *Nov.* 26*th*.—Nothing occurred till Thursday evening, when Stanley, Burrows, and Roupell met about it. With a few immaterial exceptions, all my terms were agreed to—except the *name*. This I was told was not possible to be granted, even only nominally. . . . This morning, however, Stanley has asked me if I would take the Curatorship, with the Demonstratorship of Morbid Anatomy—the latter in conjunction with Pardoe. On talking with Burrows about it, he said (and I will give you his own words, for they convey almost precisely my own ideas on it)—'If you wish to stay in London, by all means take it. You see the great difficulty there is in obtaining anything, however great may be the wish of those, who have things to give, to give them to you. I do not think that the having this, which so far as name is concerned is more respectable than the other, can in any way affect your prospects of advancement, and it will give you far better opportunities for working. The having an appointment of this kind—though inferior to what you may wish, and deserve—and the fact, which would be

known, that it was given you entirely as an expression of the good feeling of the medical officers towards you, and of their wish to keep you among them—would be a far better testimonial than any other you could have, if there were anything to fall vacant at other institutions, as King's College, the University, &c. I repeat, if you wish to be in London, it will be your interest to be connected with this or some other equally good school; and don't mind how low you begin, provided you do not compromise your present respectability and reputation.' I confess these are different views to those I wrote-on not long since—but my circumstances then were not those for the calmest consideration; and since Johnstone has been here he has thrown so bright a light on London prospects that I am almost ambitious again.

4. *Nov. 29th.* The nearer I am to the appointment, the greater the obstacles seem. Wormald objects considerably to the proposal that he should resign for me, and I believe there are others (though I know not who) that think they have greater claim to the Morbid Anatomy. I confess I had not expected such difficulty: I should not have thought the place sufficiently good to induce any one but myself to contend for it. And indeed, even now, the cases on each side seem so nearly equal that I scarcely care whether I get it or not, or whether I ultimately practise here or in Yarmouth. It only involves, I think, the question whether I should enjoy myself moderately all my life, or very little for the next 20 years and a great deal for the 20 after. I would really leave it to the tossing-up of a shilling.

Black will tell you all Hospital news—there have indeed been some good cases of fever lately. I think Latham has now 5 in his wards, all severely typhoid. He has had too a case of rheumatic pericarditis, where the to-and-fro sound, *frottement*, was heard with a *bruit du soufflet*. The man was heavily bled —to 50 oz.; and died I should say of exhaustion. The Hospital in its subordinate arrangements is in a most disturbed state: a Sister suspended for a month, for not reporting the misconduct of a nurse: a house-surgeon severely reprimanded, and in danger of suspension (not *per coll.*) for threatening to throw a bucket of water over a boisterous patient: the dressers all in arms, and memorialising, because the Governors are enforcing a regulation that no dresser shall prescribe even for a casualty-patient except in the presence of the house-surgeon: a Sister dismissed to-day for supposed neglect. All these, in the gale

of wind which is now blowing, have put the whole establishment in confusion. Nothing goes on well on the Surgical side of the House—but I confess, till this matter of my own is decided, I cannot enter into the work of the Hospital. If it were not for Johnstone, I should be miserable. We are a mutual support each to the other; he I think would blow up, if he had not me to tell his stories and abuse the Optimates[1] to; and I should be hypochondriac, if I had not him to talk of my plans with.

I have made the acquaintance of Dr. Marshall Hall lately. Budd introduced me to him, as able to tell him what Müller said of his reflex functions. This I have done, and he has sent me copies of his original paper in the Phil. Trans. and his Lectures on the Nervous System. He is certainly a sharp fellow, but I should think rather monomaniac on the *reflections*. He is restlessly anxious to be lecturing again, and tried to establish a new school near the University. He told me there would certainly be one in less than two years, and asked me if I should like to join anything of the kind. I did not say no, but I should certainly refuse. We might I think make a good assortment of Lecturers to publish 'rejected Addresses'—M. Hall, Budd, Johnstone, and myself. Earle offered me the other day the Surgeoncy to a new Consulate which is going out for three years to the shores of the Black Sea—my expenses, and £100 a year or thereabouts. However, this I begged to decline, as I could see no prospect of further advantage from having just avoided the plague, and perhaps the bowstring, as it seems the mission was a kind of secret affair—to overlook the proceedings of the Russians, I think.

5. *Dec. 9th.*—I had a long conversation with Dr. Burrows this morning. After detailing all that had been done to meet my views of the case, he said the question was now drawn within very narrow limits—Would I take the Curatorship alone? 'We cannot,' he said, 'consent to make a new place for any one, however good; nor can we turn out any one man to make room for another': and he added, 'Though we cannot pledge ourselves to use similar exertions to our present ones to advance you on any future occasion, yet I think that you ought to have confidence enough in us to suppose that we would.' Again, he said, 'If you do not take this, you lose an opportunity which may never again offer of getting into the school—for there are some, and *good* men, who have applied for the situation; and

[1] The 'Optimates' were the Hospital-apprentices.

I think you would be unwise to give them the opportunity of stepping in above you, if we lost sight of you in the intermedium between the present time and a vacancy. On the other hand (he added) you have to consider that the office has hitherto been a subordinate one—at least at St. Bart's: though, seeing it is held at the College by Mr. Owen, at Guy's by Dr. Hodgkin, and at the London University by Dr. Carswell, it cannot be considered a low or menial situation: and, with all them who know you, I am sure you would not be in the least degree lowered. Still, if you or your brother think that it is beneath you, of course refuse it. Seeing the station he holds, he may perhaps think it less than you should submit to be placed in, and sufficiently so to counterbalance the advantages that seem to be connected with it.'

You see then how I stand. From all, I think I might fairly expect some support; and from many, the strongest possible. Shall I then take this place, which, being uncertain of the disposition with which the powerful ones regarded me, I had at first utterly refused to think of? The only objection is *nominal*—and against this I can put *actual* evidence of good prospects . . . I told Dr. Burrows I should take it, unless you advanced any strong objections: and I shall see Mr. Stanley to-morrow, when I shall also try to get something in recompense for my lost title.

Thus it was settled: he was to be neither Assistant Demonstrator of Anatomy, nor Demonstrator of Morbid Anatomy, but Curator only: and was to be paid £100 a year for the work. He spent Christmas at Yarmouth; and in January, 1837, went to Paris. He writes to Miss North from Yarmouth, telling her of a heavy storm, that is noted in Crisp's *History of Great Yarmouth*:—

Dec. 26th, 1836.—My journey from London was precisely like all journeys under such circumstances—miserably cold and uncomfortable, but happily not aggravated by talkative companions: for, with the assistance of a heart-penetrating fog, two or three repulsive answers were sufficient to silence the loquacity of my neighbours, and I was kindly left to my thoughts for 15 long hours. If the cold then present had not painfully reminded me of myself, I could have been thoroughly happy in the past and future; but my very memory was at times frozen. The weather we then had has been fearfully surpassed since—you can conceive nothing more terrible than the gale

which has now been blowing since Saturday morning from the E. and N.E. Directly after church yesterday, hearing that some vessels were on shore, I went down to the beach—the wind was blowing a perfect hurricane, the sea rushing in with the most appalling power and velocity, and covered as it were with one surface of boiling foam. Two vessels, out of many that were in the Roads, were already on the beach; and as I stood there, another was blown on—the others were all pitching most frightfully. In another hour, two more came on: one of them had just time to set her sails, and made an attempt to get into the Harbour. It was intensely exciting—she had been driven almost into the breakers, but as they got up her topsails and put her helm down she bounded off with the speed as it were of lightning, and with her decks almost under water she flew over the billows. We could follow her as she went, and saw her apparently enter the harbour—everything seemed safe—but at last she checked in her course, and presently her foremast fell overboard: she had missed the river, and gone on to the beach in the South Haven: she is by this time a perfect wreck.

Most providentially it was high tide, and but few of the vessels were laden, so that they are washed very high up on the beach, and all their crews were saved with but little difficulty. At night between 10 and 11 I went down again: the wind was not in the slightest degree abated, and there was then a heavy fall of snow. Three more vessels were on shore —one had struck the jetty, driving-in several of the piles, and was now lying beating against it. I never saw so awful a scene in my life—the end of the jetty was almost constantly under water from the seas repeatedly washing over it, and the moon was completely obscured by the clouds of snow that were falling. You could hear nothing but the tremendous roaring of the wind among the ropes and tattered sails of the vessels as they lay on the beach. I walked down again this morning before breakfast—the destruction was increased and still increasing. I left no fewer than fifteen fine vessels on shore within three miles of the jetty: and the sea is still as high as ever. The crews are all, however, by God's mercy saved, and many of the vessels will probably not sustain much damage—but, if the gale continue, their number will be even further fearfully increased.

I would give anything you were here. You who have known our coast only in peace would scarcely recognize it in

this war. I had almost forgotten what a storm was. Oh, talk of moonlight and sunset—how far are they all surpassed in magnificence by this—what a picture it presents of the power and majesty of Him who 'layeth the beams of his chambers in the waters, and walketh upon the wings of the wind.' A calm may be perfect: the moon may shine in its very extreme of brightness: but a storm seems to acknowledge no limit—every succeeding hurricane seems more mighty than the last, and you know not how much more violent it may become. Every idea of space or degree seems laughed to scorn by its furious impetuosity.

Paris. January–April, 1837.

Paris, at this time, stood first among the Continental Schools of Medicine, and drew many students from London. George Paget had gone there, in the winter of 1833–1834, with his brother Alfred: they had put up at the Hôtel Corneille, but had fled from the discomfort of it to 7, Rue Tournoise. Their letters home might well be published, for the minute and vivid account that they give of Paris seventy years ago. A great multitude of students of all nationalities filled the lecture-rooms, and pushed their way through the dull unwholesome wards of the Hospitals:—

You can form no idea how crowded the medical lectures are here. I have discontinued attending the public ones (there are at least 2,500 students here) because it was necessary to go full half-an-hour before the time of commencing, in order to get a seat within ear-shot of the lecturer. In the same way, there are about 200 students going round every morning with each of the best physicians at the hospitals. So that you are tolerably lucky if you get in a third row round the bed of a patient: the light by which you see the patient being moreover only that of a candle, because it is so early in the morning. 'Tis very miserable to get up so in the morning, before it is light, and turn out immediately into a thick fog, thro' which one has to pass to the hospital, more than a mile.

George Paget writes thus in 1833; and it is not likely that James Paget, in 1837, found things better managed; but his letters to Miss North, the large thin sheets crossed and re-crossed with infinite care, five thousand words to one sheet, say nothing or next to

nothing about his work. They are more concerned with matters of religion. He was, for most of his time in Paris, out of his element; and he writes, after the fashion of his age, with vehement Protestantism. He went so far as to make friends with an unhappy man who used to get-up in the cafés and preach against the Roman Catholic Church. At the end of the three months, he made his peace with Paris, at Fontainebleau.

Letters to Miss North. Paris, Jan.–March 1837.

1. *Hôtel Corneille, près de l'Odéon, Jan. 29th,* 1837.—After an hour's ineffectual attempts at lighting a fire on two logs of damp wood, I may surely take refuge in writing to you. Try to imagine me, sitting in a low chair, at a high table, in a room about 12 feet square, at once my chamber and drawing-room, without a carpet, or anything presenting the smallest appearance of comfort—and to add to my chagrin the only *garçon* on the establishment who is not enjoying the gaieties of the Sunday has just shown me that it was simply my ignorance of wood-fires that prevented my lighting it. Well, well! it is not after all essential to one's happiness to be secure from these small annoyances, and I thank God I have too many blessings to allow them to occupy more than a very small share of my attention. . . .

It was not without peril that I made my way to the Steam Packet Wharf, in the worst cab that ever was dragged by the worst horse; but, there arrived, we soon started, about a quarter of an hour after the opposition packet. Our passage was perfectly without interest—you will not, I hope, think I am falling into the manners of the country if I mention, as the only thing remarkable that happened to me before reaching France, the fact of my being obliged to sully my chirurgical purity by ushering into the world a young sea-nymph—yes, I actually had to 'welcome to earth an ocean-child'—and both the mother and it were landed under my superintendence at Boulogne next morning, 'likely to do well.'

My journey from Boulogne to Paris, which is about 180 miles occupied no less than 34 hours. The roads were certainly not in excellent condition, though certainly as good as they now are in England after so much rain; the slowness with which they travel is entirely owing to the absurd construction of their *diligences.* You can imagine nothing more absurdly cumbrous. The whole is drawn by six horses, three

abreast, which would disgrace an English plough; and to urge whom to a speed of 6 miles an hour, at most, the driver is incessantly smacking a huge whip over their heads, and hallooing just as in England you may hear men driving Pigs. He is by no means sparing in his use of the weapon in other modes than those of making a noise, but both with it, and another shorter and capable of doing more execution, he inflicts the most atrocious blows—and these either with the thong or butt-end, as the degree of dullness natural to his beasts requires. All this in the most enlightened nation! At any rate the science of driving is at but a low standard here.

The most remarkable point in which the *shops* of Paris differ from those of London is their extreme gaiety; the most showy articles are displayed in the most prominent manner, and all the exterior is painted with gaudy colours, gilded letters, and anything that is most conspicuous. There is an immense preponderance among them of the costume and mask shops, which, as the Carnival approaches are unusually decorated and gay—and next to these are confectioners and fruiterers—and with these a profusion of cafés and restaurants. The whole presents certainly a most gay scene; but it is sadly contrasted with the narrowness of the streets, their irregularity, and shamefully bad pavement, and the general poverty of all above the shop-portion of the houses, running-up as they do to 5, 6, or 7 stories. The streets are all lighted with oil-lamps suspended from a rope which passes across from one house to the opposite on the other side; and even these are very distant from each other, so that when the shops are closed you have to grope your way to avoid walking into the kennels, which run down the middle, usually in a rapid stream. The large majority of the streets have flag, at most, on only one side at a time; and you have the option either of walking on the stones, or of continually stepping across through the mud. . . .

Enough of description of Paris, even though I revert to some account of myself. I have at present found very little difficulty in making myself understood in French, but have been monstrously bothered to make out their answers. I do not despair, however, at all. To-day I actually attended four lectures—not so much to learn the matter as the language.

2. *Feb. 5th.*—I am glad to find myself quietly at home on this the gayest Sunday in the year in Paris, and perfectly happy without one sigh for the follies abroad, too. . . . The Sunday before Lent is here called *Dimanche Gras*, being celebrated by a grand procession round the most public parts of

Paris to exhibit a Fat Ox—it is repeated on Tuesday, *Mardi Gras*, with great pomp and ceremony. I did not see the procession to-day, but on my return from Church I assure you the Boulevards, and a street longer than the Strand, were *crowded* with double rows of carriages, public and private—multitudes of people on foot—and, to keep them in order, a regiment of Cuirassiers, and several companies of the National and Municipal Guards. I scarcely speak figuratively when I say that the whole of Paris was gathered together to see literally only a Prize Bullock. It being too the first day of the Carnival, many were in costumes and masks—the children most absurdly dressed—and everything put out in its possible extreme of gaiety. There are at this moment going-on 80 or more masqued balls in different parts of the Town and neighbourhood, and 30 theatres open to exhibit their most immoral and most probably *therefore* most attractive pieces. And then they coolly say that because in England we are not allowed theatres, &c., on Sundays, therefore 'the English are not so free a people as the French.' Free indeed! with about 30,000 or 40,000 soldiers in constant service in their city; and not less than two entire regiments, besides gens d'armes, ordered out to prevent confusion in two or three lines of carriages on a Sunday. . . .

There is a long Quay running along the side of the river opposite the Louvre and the Tuileries, where there are scarcely anything but book and print shops, at each of which are exposed in glass cases some of their best specimens—and, as I often pass along it, you may guess the amount of forbearance I am obliged to exercise, to preserve that prudence which would run utterly away from my consciousness of deficiency of means. However, at present I have been most moderate—and indeed I can scarcely say that I have as yet even seen anything more of Paris than that which is to be found in walking the streets: which is often as much, on a common occasion, as would make a spectacle in England. For instance, yesterday morning there was the Review of about six full regiments, opposite the Tuileries, but it was exciting little or no attention—they called it only a *petite Revue*. By the bye, the whole appearance of the French soldiers is exactly contrary to what one had, probably only from childish prejudice, imagined. Instead of being long, lank, shrivelled fellows, they are the shortest and most absurdly rotund figures I ever saw. Their famed cuirassiers are not much better in

their appearance, and are by no means well equipped: and their horses especially are raw-boned and miserable: a body of our life-guards and horse-guards would not a little astonish them. . . .

I cannot say I have yet seen more than one handsome Frenchwoman: she was a girl in one of their Hospitals. I hope you are not anxious to know what are their fashions, for I really could never describe anything of the sort, nor ever discover any one thing more generally adopted than another. I only see that many men are fools enough to wear velvet cuffs to their coats, and to have flowers embroidered on their collars, but nothing short of such absurdity as this arrests my attention. This degree of smartness among the men is however rare, and the majority are disgracefully shabby. I assure you the medical Students here are the most ruffianly, ill-looking set of fellows I ever saw. Even in England I had always thought them bad enough, and too bad; but here you can conceive nothing so outrageously vulgar as their appearance—wooden shoes, ragged coats, and unwashed and unshaved faces are the ornaments of a *large* majority; and really, but that I rather like to appear as an Englishman, and if possible as a gentleman, I might fairly have left my two best suits of clothes, and nearly all my linen, at home, without losing any of the respectability of my *professional* appearance. It is annoying to see, too, how readily Englishmen fall into these customs—it is often difficult to distinguish them except by their language; and this is often as bad as even Frenchmen. However, I hope a good deal of the worst is to be set down to the Americans; of whom a great many are, I know, studying here.

3. *Feb. 19th.*—The *Bœuf Gras* was not larger than a moderately good Hereford Ox; and the procession was most absurd. Nothing could be more utterly French than the Carnival itself. The whole of the Boulevards, for about six miles in extent, were crowded with people in carriages and on foot, to see a few fools in costumes and masques—it was the most extraordinary case of one fool making many I ever saw, and does as little credit to their decency as to their taste, seeing that the persons whom the better class, and in fact all Paris, went to see and mix with, were of course not even of doubtful morality. The costumes were (at least in Public) very poor; and indeed nothing but gross buffoonery seemed to be aimed at. At night, the streets were full of people going to about 80 different masked balls; and next morning (that of Ash Wednesday) there were hundreds of men and women reeling intoxicated

about the streets, attempting to go home from the night's orgies. It was a perfect scene of public dissipation and bestiality. I remained at home nearly the whole day, to cleanse myself of the pollution.

4. *March 3rd.*—Tell your father, in answer to his question, that I have only avoided disappointment by having expected very little. The state of medical science in France is on the whole, I should say, very nearly equal to that which it has attained in England. In many points, especially in surgical practice, they are inferior; in others, as the science of medicine, they are far superior—though I question whether this be not the merely temporary effect of the coincidence of three or four highly talented men, who give their attention to it exclusively. In their knowledge of the works of others, or in what we call medical learning, they are far inferior to all other nations; so that perhaps their numerous piracies are excusable on the ground of ignorance. For the study of medicine, generally and in all its branches, their plan is on the whole inferior to the English: the very excess of means which they possess in some parts makes them superficial in all; while in others, and especially in Hospital practice, they have scarcely any opportunity of studying at all; and hence I do not doubt the fact of their inferiority as practitioners. On the other hand, the advantages they offer to any one who wishes to study any one class of diseases in particular are immense; and they deserve great blame for not having made far better use of them.

5. *March 12th.*—Though it is now 11 o'clock, and I am surrounded by not a few negative and positive annoyances, I must begin to thank you for your letter, which I have just read with much pleasure. It was the happiest antidote to the disquietude of my mind, after an argument of two hours with a hard-headed English infidel, who was pregnable to neither religion nor common-sense, and the annoying frivolity of a little Frenchman who puts his hair in curl-papers every night, and whom I only admit into my room because he cannot speak English. You see I am scarcely cool yet. . . .

I have bought lately Pascal's *Pensées* and *Lettres à un Provincial*; and really I never remember to have read anything so nearly divine as many parts of the former are. His immense mind of philosophy seems humbled to that of the merest child when he speaks of the things which belong unto God; and yet, as it were unintentionally, he thus argues with the greatest and most convincing force of sentiment and eloquence. . . . I spent a most happy day last Monday, the

weather here was so clear and joyous that my heart felt as light as if I had no cause for care; and I believe I said to a friend, as we were walking along the Garden of the Tuileries, 'If England were not in existence, I could for this day be happy in France.'

6. *March 22nd.*—We did not go to Versailles, but to Fontainebleau,[1] from Monday to Wednesday. I never wished more to have you with me, and I think, if we are spared to tourize together, our first trip shall be to Fontainebleau—even though it be necessary to go to it through Paris. Since that time, I have really been nowhere, and the time wears away dully enough. One of my friends left to-day for Germany; and the other, finding me impenetrable to his absurdities on religion, and on what he erroneously thought love, has resorted to other things equally absurd but less offensive; and to-day has broached the probability of discovering the philosopher's stone. From the probability, he at once concluded it done; and has since speculated on the plot that would thence result, and in which he considers himself as personating the hero. If you think him slightly deranged, you are not far wrong, though he is only in the state of the majority of this world, and has sense enough to pass with them—the majority—as a man of unusually profound intellect. You need not envy our weather; for the last three days it has been freezing hard; and to-night hot fires, hot chestnuts, and hot bishop, had scarcely any chance with the cold.

In April, 1837, he came back to Millman Street, and took up his work as Curator of the Hospital Museum. In August, he was ill, and went home to recover his strength. In October, on the first anniversary of their engagement, he writes to Miss North—

When I look back on the past year, I can hardly think myself the same being. Then, a mere dependent boy, without one shilling, and without, as far as I could clearly see, the prospect of earning one in a respectable manner,' I had the

[1] Mr. Barrow writes: 'We met in Paris, where I resided for the best part of a year; our meeting was of the most cordial description; and he entered as usual into all social acts which in no way interfered with attendance upon each course of Lectures or Clinique. On one occasion, I did persuade him to relaxation, and that was for a two days' excursion to Fontainebleau. Our party consisted of Clifton of Islington, then a student, Charles West, and Square: we stayed at the *Aigle Noir*. Paget was the life of the party, and he nearly walked us off our legs in the Forest: our guide declared he would never again walk with *les Anglais*.'

strange rashness to offer to you—and you (whom I must not describe) the equal folly to accept me. But what blessings have we since been granted. Among 'all the blessings of this life' I can indeed first thank God for you. . . . I have to-day been writing to the proprietor of some chambers in Lincoln's Inn Fields, but I am not certain of having them. If I miss them, there is another set: and if *them*, I shall—Oh, I know not what I shall do—raise a flag and build a booth in the street. The Hospital and Gazette both prosper: at both I have of late been well at work.

Serle Street. 1838.

In January, 1838, he moved lodgings for the last time, and went to 3 Serle Street, Lincoln's Inn Fields. The ground-floor of the house was then, as it is now, Ravenscroft's shop for barristers' wigs and gowns. He hoped to get patients from Lincoln's Inn Fields: but his whole income from practice, carefully noted at the end of his Memoirs, was as follows:—

	£	s.	d.		£	s.	d.
1836–7 . .	5	1	0	1840–1 . .	12	0	0
1837–8 . .	8	8	0	1841–2 . .	23	13	0
1838–9 . .	17	17	0	1842–3 . .	15	4	0
1839–40 . .	14	3	0				

The move to Serle Street coincides with his first candidature for an Assistant-Surgeoncy at the Hospital: but he only 'put his name down' as a matter of form; he did very little canvassing, and retired before the day of election; and Mr. Wormald was appointed.

In March, 1838, his friend Johnstone died of typhus fever. In May, his salary as Curator of the Hospital Museum was suddenly reduced from £100 to £40—a cruel loss to him. He attributed this bad affair of the Curatorship to the ill-will of one member of the staff: but it appears also that he was unable to give his whole time to the work, and would not promise to hold it for years to come. It may have seemed fair, to one or more of the staff, to treat him in this way; but it brought him such loss in his poverty, and such disappointment, as he could hardly bear: he was sure that it was done only to drive him from the Hospital: and he almost made up his mind to go over to the Aldersgate-Street School of Medicine.

Letters to George Paget. 1838.

1. *Jan.* 26*th.*—After making a mock fight for ten days, I have gradually left off canvassing, after calling on all those Governors for whom I had letters of introduction, and some others among the more influential. The result has altogether been satisfactory, though I do not think I could by any exertion have got more than six votes. But I have got over the idea, which was still somewhat prevalent, that I should never think of such a thing, and that the having been a hospital-pupil or house-surgeon was essential. In due course of time, I am assured of Hospital support for my election. My furniture must at present come rather short, to pay for this canvass—a sum of money which, though not exactly conveniently, is yet I am sure *very* well spent.

2. *March* 20*th.*—I had hoped Johnstone would bring this parcel of books to Cambridge, but his very distressing illness forbids it. It is fearful to think of the dangers one is obliged to run for a few guineas—he had attended more than 150 cases[1] in the last six or eight months in Hope and Mark wards: but I am glad to say the disease seems moderating both in extent and severity, though it is now in all the Hospitals, and most severely at the Dreadnought. Another of our pupils died last week of it; and the late House-surgeon of St. George's a few days ago. *March* 27*th.*—Poor Johnstone died last night: he had never rallied from the commencement of the attack, but, as long as his senses remained, despairing of recovery, he went on from bad to worse with scarcely a hope. He had been most carefully attended by Drs. Hue and Budd, but medicine had no influence whatever on the disease, which seemed to *poison* him. I cannot tell you how I feel his loss —he was the only friend I had in the Hospital, and he was a most sincere and estimable one. I had never received anything but the truest pleasure and profit from his society, and I shall look in vain for someone to fill up the perfect loneliness in which I now find myself left here. The loss to his family will be fearful—from what his sister told me he seems to have been their only stay. *April* 14*th.*—We have less fever now, by far, than a month ago: it is evidently decreasing both in frequency and severity: but another physician here, a Dr. Fergus, has died of it. Budd has taken Johnstone's rooms, partly intending to be nearer the Dreadnought, where he has had almost

[1] It is to be noted that cases of typhus were not at this time distinguished from cases of typhoid.

killing work of late. . . . Our session is closed; and Stanley commenced lecturing at the College yesterday—as usual, 'a thing of shreds and patches' collected from every quarter, not a few from 'my intelligent friend,' who finds these easy securities against giving offence.

3. *May 23rd and 28th.*—Since I wrote to you about the Curatorship, I have seen Burrows. He said he thought I should be very wrong to throw it up at once, because if I did I should have no chance for the Hospital, or anything else there, and so on. I have written, saying I do not wish to give it up, for many reasons. . . . I have offered to take £40 a year, if I attend from 12 to 4. This is a heavy reduction; but I have nothing else in prospect, and I might be very long before anything else offered. Besides, the time I thus gain, 3½ hours of the best part of each day, is very valuable. Hitherto, I have scarcely been able to do anything more than my necessary work: I could not in any way forward my prospects of getting practice, could scarcely keep up old acquaintances, and could never make new ones. My plan now is to accept these terms, if I cannot make better, and to try and make up the lost £60 a year: this I hope I may do by working more for the Gazette or anything else that may offer, which with my additional leisure I may perhaps easily do—so that if I can get the work I have no fear of earning the money. This for present needs: and the future I must reduce in amount. I must complete the book on General Anatomy: this, if as good as I hope I can make it, will secure me a seat at St. Bartholomew's or some other School. I must finish it in 12 or 15 months, and in some way publish it. I am sure I can (like the dwarf on the giant's shoulder) make a better than has yet been written; and then (D.V.) I shall be a desirable young man for any School.

My present prospects and condition in money matters are not bad. The next number (monthly) of the 'Penny Cyclopædia' will contain about £25 worth of mine, besides £6 worth of poor Johnstone's in a subject which I shall hereafter do myself. You may see the articles—Gymnastics, Hair, Hare-lip, Haller (Johnstone's), Harvey (do.), Hæmorrhage, Head (Injuries of), Heart, and Heberden. However, this is an unusual haul—still, I think I may calculate on £70 a year from it while it lasts. I can work the Gazette to about £80 a year more; so that I may, I hope, reckon on £200 a year, which will swim me. *June 2nd.*—I am glad to say I had a patient the other day: and if I can make him well pretty soon,

I hope more of the same kind may follow: for if I can once make £100 a year out of these young lawyers, I shall hold myself established.

Serle Street. 1839.

The date of his exposure to the infection of typhus is Dec. 18th, 1838. His notes of the *post-mortem* examination that he made that day, in a miserable room in Lambeth, say: 'She had been living in a state of the deepest misery and poverty, just maintained in food by the parish: she was to have gone to the workhouse, but in the morning she was found dead in her bed on the floor. It was at this case that I caught the spotted Fever —of which I had the first symptom, at Yarmouth, on the evening of the 29th of December, and the crisis occurred on the 5th of January, 1839. Nine cases of the same fever occurred in the same house: but there is no reason to believe that she herself had had it.' He got back by coach from Yarmouth, as best he could, with the fever on him; and his brothers George and Charles nursed him through it, with the landlady's help.

1. *George Paget to Alfred Paget. Jan. 5th,* 1839.—James' illness has run a most dangerous course, but thanks be to God it appears now to have taken a favourable turn. I believe I am not too sanguine in considering that it has passed its worst crisis. Everything that care can effect shall be done to prevent a relapse. Poor fellow—at 12 last night we thought he was dying, and indeed no living man could be nearer to it. The favourable change showed itself at 5 A.M. You shall hear regularly of him in future. Offer your prayers and thanks to God for this appearance of recovery.

2. *Charles Paget to his Father. Jan. 23rd.*—Yesterday, he got up, with some assistance; and on my arm he came and *breakfasted with me* in his sitting-room, blanketted and pillowed in an easy chair, sat a little while afterwards and then to bed, and up again to dinner with me, and after a bit of Yarmouth chicken drank all your good healths in a glass of (a little diluted) port—and to bed again. If it pleases God to continue this great mercy to him and us, I think in a week from this time you may be looking out to see us. To-morrow we shall drink your healths at a much earlier hour, James' appetite for dinner being quite prepared and ready by one. He is sporting a new

wig—I tell him 'tis a judgment for wearing his own hair so badly—wig rather curly. I do not wonder at his exertion to get-on up here. For medical men, what a difference!! I never saw such agreeable and talented men as all who visit him—Dr. Latham (who asked after you), Dr. Burrows, &c. &c. The first-named, when I thanked him for his kindness to James, his reply was most satisfactory—'Oh, don't talk about it: he is a most valuable man, and will continue to be, to his fellow-creatures.'

In March, he was back in London at his work as Curator of the Museum; and soon afterward was appointed Demonstrator of Morbid Anatomy. Other lesser events of the year are told in his letters to Miss North:—

1. *July 20th*, 1839.—Living many years alone, one acquires independent habits of thinking and acting, which soon engender a belief that no other person would conduct affairs, in which oneself is interested, with sufficient care or tact. And this suggests a new figurative expression of the course of Love, which I have never yet heard of—though, as my reading is limited on that subject, it may have been often made. You know that it is not possible to grow the same corn on the same land for many years in succession; the soil is in time worn out, unless there be what is called a mutation of crops. There must be barley one year, clover the next, wheat the next, and so on—and by this the same land bears each year the same full crop of some different produce. So in this, Love may begin upon beauty, but it will soon wear out if that be the only seed sown: beauty must after a few years be replaced by love for wisdom's sake—this by love for constancy's sake—this again by love for mutual dependence's sake—and so on: and so a man may pass through his life, ever in love, as warmly and sincerely, if not so full of expression and gaiety, as he had begun. There! there's an essay on Love: match that if you can. To-day I again dine with Stanley: I shall meet my friend the Professor from Madrid, and shall have to work away at my French again. I have found out something for another paper, by which I hope I shall gain a little more reputation[1]: for I shall be able to prove that nearly half the adult population have had a disease

[1] 'On White Spots on the surface of the Heart, and on the frequency of Pericarditis': a paper read at the Royal Medical and Chirurgical Society, Nov. 26th, 1839.

of the heart at some time of their lives—not indeed an important, not perhaps an injurious one, but still one that is discernible. I need not describe it, for except that it pleases me it cannot interest you, who perhaps are one of the healthy half of the world.

2. *July* 27 *h.*—On Wednesday, we had the great Venison Feast at the Hospital—a noisy dull display of gluttony—the fare was good enough, but not enough so to keep me from thinking of more important things, and I could not but feel somewhat depressed when I looked at the totally indifferent countenances with which a vast majority of those, on whom some of your prospects are dependent, regarded me. It is happy indeed that in this case one must be so nearly passive that there is less temptation not to commit it all into better hands. My success at the Hospital has already been far greater than I could have any right to expect, my prospects brighter every day: and when all this has been done for me, when my own exertions have had the least possible share in the result, one ought to remain much more calmly and await what is sent than I can feel at times disposed to do. . . . I met Miss —— on Thursday evening at Mr. Hurlock's: and I was utterly horrified. I had imagined that she would be characterized by a kind of dove-like softness and simplicity—that her gentleness and modesty would have rendered her quite inaccessible—but I found her manners absolutely rough and coarse, her voice loud and her expressions extravagant, her vanity excessively predominant and her person far from prepossessing (No, not quite so bad as all that), but still, though she did not spare pains to make herself agreeable, she was to my mind singularly repulsive. Her voice too is, I think, altered and therefore much deteriorated: instead of those soft flute notes which seemed natural to her, she has now one of awful power—more like the tearing of calico than an angelic melody. Of course this is rather highly coloured—but really, though I went with the idea that I should have to keep all my love for you and my hatred of Popery in my mind, to prevent my falling in love slick, I came away with the most perfect feeling of self-satisfaction in having secured you. But it is time to have done, for this is sad trash.

3. *Aug.* 3*rd.*—I keep on at my old work: do not thank me for working for you: I fear there would be only too much inducement without you—though it is the idea that you are the chief end of it all, that alone prevents it from being at times most irksome. I continue my Italian work occasionally,

but it is rather dull: the medical books, which alone I read, are full of such trash. My own book goes on merrily; by the first of October, I hope to have written a good, and that the hardest, half of it; and my prospects of its success do not diminish. The occupation, however, is not so amusing but that I have often felt very willing to exchange it for the pursuits more adapted to this weather, instead of poring over dull German by candlelight, with no noise but those of people and carriages. But thank God such thoughts seldom last long. He has granted me that happy temper of mind that can without much trouble adapt itself to nearly all circumstances.

Serle Street. 1840.

On June 18th, 1840, leave was given to him, on Mr. Stanley's application, to use the Anatomical Theatre instead of the *post-mortem* room for his demonstrations on Morbid Anatomy. In July, those wise students, who had asked that he should be allowed to lecture to them, wrote to him, thanking him and hoping to offer him 'some more formal acknowledgment' when the winter-session came round. 'The lectures have been of such a nature as fully to confirm us in the opinion which we expressed in a memorial, addressed to the Medical Officers and Lecturers of St. Bartholomew's, in November last—*viz.* that the establishment of a lectureship on Pathological Anatomy in this School would be the only means of rendering the *post-mortem* examinations generally beneficial to the Students.' Among those who signed this letter were Anthony Brownless, afterward Vice-Chancellor of the University of Melbourne; William Martindale; Joseph Partridge; Edward Cock; and George Murray Humphry.

Letters to Miss North, 1840.

1. *July 29th.*—I have just commenced a long watch with a sick friend—one of my pupils, as I suppose I may now call him, a very nice fellow, whom I am sorry to find severely ill with inflammation of the lungs: a disease which is not contagious, so that you need not feel any of your kind apprehensions for my safety. The night will not seem to pass heavily while I am writing and, as far as I can, talking with you. . . . Stanley starts to-morrow for his holiday: he leaves me in charge of some of his business at the Hospital, the

Museum and so on. I stick to my book on General Anatomy: to which if I can devote seven or eight hours regularly each day, I may hope to make an important reduction in the portion of it that still remains uncommenced. I have determined to learn to read Dutch: the Professor of Anatomy at Amsterdam has been over lately, and from what I can learn of him there are some very good men working there, whose books ought to be more generally known. He has promised to send me his own, and I shall endeavour to translate them: would not a 'translated from the Dutch of Professor Vrolik' sound rather grandly? From what I can see it is an easy language, and I shall at least have the advantage of a monopoly of its knowledge. I fear all this is being too much engaged in the things of the world for any prospect of success in the more urgent things of heaven—but my hope is that there is not more danger in a constant even worldly occupation of the time than in an idle permission of its passage: of this at least I am sure, that no time of my life has been so fraught with danger as that in which I have been farthest and longest from my work. . . . I broke off here to assist my friend, and then took to reading some German; over which I have profoundly nodded for several hours, and here it is just morning.

2. *Aug.* 13*th.*—I fear, if selfish can be applied to the common interest of two, we shall deserve that epithet; for really that which does not concern one of us seems to excite very little of the attention of the other—and as for the affairs of the rest of the world, we seem to have agreed to let them pass by, if they will only leave us to ourselves. (A very confused and unintelligible sentence, but take no pains to make it out, it has nothing in it.)

I am very glad to say my lunatic patient is recovering: he is a very agreeable hearty man, and I cannot but take great interest in him. Your regrets at the loss of the happiness he anticipated from his prosperity are rather misplaced: you cannot conceive a man happier than he has been—his insanity has been in his excess of joy, which no restraint could damp: he has literally overflowed with benevolence and with absurd schemes of kindness to everybody he knows. Especially, as he dates all his happiness to his marriage, he has been anxious to give everybody the same chance; and has infinitely amused himself and us by the matches that he has arranged—as, *e.g.*, between his keeper, Sir Hercules Hickling as he calls him, and one of the chambermaids. At one time, he had a design of offering me one of his daughters; but I believe a little im-

provement in his mind suggested that this would be rather extravagant even for him.

I had a tolerably fast day's work yesterday: I was at the Hospital at 7, and after breakfast went to Hanover Square, then back to the Hospital for another hour, then to Kennington, then to the Hospital again for near an hour, then to Fulham, and then home to dinner—and all without my own carriage! I went to Fulham to see your brother's servant: with a regard that in these times would pass very well for conjugal, he was extremely anxious, and so you may be sure was she, for a slight sore throat which she had unhappily caught by sitting in an atrocious hard-hearted draught. She has not much throat to be bad, and what she has was not very bad. I left her to prosecute the laudable design of eating all the meat she could for fear her strength should fail her.

3. *Aug.* 19*th.*—I promise myself a day or two for holiday when you return—there are one or two sights I must see—but pray come prepared to damp the ardour for an *excursion* which is being projected, and which I have hitherto escaped, and still look forward to with infinite distaste. . . . I do think I have succeeded to perfection in offending most of my useless acquaintance. I can scarcely remember my last invitation to an Evening-party; and, so far as I can judge, I have less prospect than ever of their being repeated—It is really a great deliverance from anxiety and trouble; and if it leaves me more disposed and more at leisure for your society, you dearest at least can have no reason to complain. I fear you will think that in spite of your kind remonstrances I am still growing more unsocial. I feel indeed that I am—yet I cannot easily avoid it, and I cannot convince myself that there is sufficient good reason to make a strong effort to overcome the increasing indisposition for the company of anyone but yourself and my professional acquaintance.

Serle Street. 1841.

On April 14th, 1841, he was elected Surgeon to the Finsbury Dispensary, on the resignation of Mr. George MacIlwain. The votes were 251 for him, and 195 for Mr. Birkett: and this great number of votes tells of very wearisome canvassing.[1]

[1] The Secretary, Mr. W. H. Pratt, writes, 'Personal canvassing was the custom, and the friends of candidates often qualified as Governors, in order to record their votes. The qualification was a subscription of one guinea.' Sir James Clark, who was always his good friend, obtained the King's

In July, came the hard loss of the promised Demonstratorship of Anatomy at the Hospital. Everything had seemed settled; he kept, all his life, a copy of the rules that had been drawn up—'The Demonstratorship to be held conjointly by Mr. McWhinnie and Mr. Paget. Each Demonstrator to deliver not less than 50 demonstrations in the season, with besides the appropriation of one morning in each week to an examination of the class. The Junior Demonstrator to have the charge of the whole Museum, to make new preparations of morbid structures, to have the charge of the Catalogue of the Museum, to undertake the entire personal superintendence of the daily dissections, preparations, and drawings required for the Anatomical Lecture.' But, beside the privileges of the Hospital-apprentices, there was this further difficulty, that Mr. Wormald was very popular with the students; a great number of them asked him to withdraw his resignation; and he withdrew it. His temporary retirement was nicknamed 'the Bedchamber Resignation.'

On Thursday, Sept. 30th, as though to make up for failure in London, there was a festival at Yarmouth: the shipping-clubs of the town presented a testimonial to Samuel Paget for his services as their Treasurer; they feasted him in the Town hall, and drank his health with nine times nine. Among the toasts, were two that sound far away now—

The Queen, God bless her, and may her reign be a long, happy, and prosperous one for England.

Our wooden walls, the pride of England, and the glory of the World.

And the speech of the Chairman of the feast, Mr. G. D. Palmer, gives a good account of the national importance of the Yarmouth shipping, sixty years ago. The two clubs, British and Foreign, held property worth more than a quarter of a million:—

'As he had advanced in life, he had narrowly watched the improvements of the mercantile marine of this country. He

proxy for him. His days of attendance at the Dispensary were Monday, Tuesday, and Friday at 9.30 A.M. He resigned his appointment on May 31st, 1843, when he was appointed Lecturer on Physiology at the Hospital; and was made an Honorary Life Governor of the Dispensary, and in later years Consulting Surgeon.

had viewed the ships of America in the Thames, but he could now congratulate his Yarmouth neighbours that they had rivalled their Transatlantic friends. He had viewed in the docks of London the line of packet-ships that sailed to America, but Yarmouth could rival, nay outrival them, and now stood pre-eminent for those qualities which the speedy transit of goods required. He was proud to stand before his fellow-townsmen and shipowners, and congratulate them that they had shipping in this port that would rival the world. He had visited with pleasure the Yacht Club at Cowes, and to them he would not hesitate to throw down the gauntlet; for he contended that if they were to collect what they called the crack ships of our port, they could rival the Yacht Club at Cowes. Our vessels were superior both in construction and equipment. Go to what part of the kingdom they would, they would find Yarmouth sustained a reputation for the superiority of her shipping.'

The old letters and newspaper-cuttings are pleasant reading here, with their acounts of this festival. But it was near the end of the good times: and in 1843 the house on the Quay began its long tragedy.

James Paget to his Mother.

Oct. 1841.—It is happy for the honour of one's town, that there are some in it whose character is good enough to redeem it from some of the pollution that it has from those in authority,[1] who seem to be rather the Devil's ministers than those of God, whose they ought to be: and much more happy for us, that of all the good, the best beyond compare is my own father. I have been looking anxiously for some account of the Paget *fête*, which I cannot but regard as the highest honour which my father, in his position, is capable of having attained. If he had set before himself, when young, the highest earthly object which a Merchant in Yarmouth could hope to attain, it might well have been this which he reached on Thursday. But enough of this—I do not doubt he had compliments enough paid him to last him for many a long year. May God grant him many an one; and make us feel the responsibility that lies

[1] The reference is to the corrupt practices of the Parliamentary election (June 29th, 1841). In August, 1866, the Royal Commission came to Yarmouth; and in May, 1867, the borough was disfranchised.

on us to maintain his good name—to remember what he himself sings—

For my sons I've preserved it unblemished by shame,
And it still from a spot shall go free—

and to be sure that we cannot do this better than by following his and your example.

Our season at the Hospital has just begun, and I am glad to say that we have every prospect of a good accession of new students. It seems rather hard to find myself still not sharing in the profits, and still holding the same subordinate offices; yet I thank God I can still be contented and patient still to wait; and, as far as I can tell, all my friends seem to think my hardship much greater than I do myself. It is in all probability only a postponement of good; and I have hope enough to believe that it is a postponement for but a short time, and that at last all my much labour for small profits may cease.

Serle Street. 1842.

Both at Yarmouth and in London, this was the last year of the old order of things. At Yarmouth, Charles and Frank Paget were failing in health, and fighting hard at the impossible task of pulling their father's business out of its troubles and preventing the sale of the Brewery. For the son in London, it was the last year at Serle Street: a time of heavy writing, no longer for the 'Medical Gazette' and the 'Penny Cyclopædia,' but for Sir John Forbes' Review, and the unfortunate 'Biographical Dictionary'; above all, for the Catalogue of the Pathological Specimens of the College of Surgeons Museum. The annual Reports for the 'British and Foreign Medical Review' were marvels of condensed work, giving in some fifty pages the whole year's results, at home and abroad, in General Anatomy and Physiology. The first report, 'On the Chief Results obtained by the use of the Microscope in Human Anatomy and Physiology,' was published in the Review for July, 1842; and was afterward published in separate form by Messrs. Churchill. The later reports, 'On the Progress of Human Anatomy and Physiology,' appeared in the Review during the years 1843–1846, and were reprinted by Messrs. Adlard.

Letters to George Paget. 1842.

1. *Feb.* 10*th*, 1842.—I think I told you that I had declined having anything to do with the Pathological Catalogue of the College of Surgeons. Since I returned from Yarmouth, a more reasonable plan has been offered, and has this afternoon been determined on, by which I shall be occupied in it. The Council have requested Mr. Stanley to superintend the making of the Catalogue, and to engage whatever assistance he pleased. He of course asked me to do it with him, and I agreed. I have as yet very little notion what the amount of work will be. I am to do nothing but make the Catalogue: the College-students and others will put-up all the preparations that I wish: but I suppose it will not take me less than 2 years at 2 hours a day. However, on the whole, I congratulate myself; I can now give up that 'Medical Gazette,' which has long stunk in my nostrils: and if I do the work well it cannot fail of bringing me reputation, if not some more tangible advantage.

They have commenced printing the 'Biographical Dictionary,' and I am actively at work upon my share of it. I hope you will recommend it at Cambridge, for I look to it for a 10 years' annuity of some £30 or so a year! Its most striking design is to include a more complete set of lives of the eminent in each science than has yet appeared in any Dictionary devoted to that science exclusively.

There is little news in Medicine, beside the case of which you doubtless saw a report in the 'Times'—the operation by Fergusson of King's College. . . . There are great reforms at hand in the Colleges of Surgeons and Physicians: but I hear no more of them than that the Apothecaries' Company are to be no longer an examining body: their functions in this respect are to be divided between the two Colleges.

2. *March* 14*th*.—The person who had undertaken to write the lives of physicians for the 'Biographical Dictionary' has given them up, finding it, he says, too heavy. Mr. Long will be very glad to receive them from anyone whom I can strongly recommend; so I shall be glad to hear if you have any inclination for them, or for any part of them. . . . I get on with my task at the College; but it is heavy work. I yesterday assisted in selecting the 300 best preparations from Mr. Liston's Museum; for which the College is to pay him £450. With these and others, which will be purchased and added while the Catalogue is in progress, I hope that the Museum

may be made the best (in the Morbid Anatomy Department) in Europe. I find my appointment to the work has caused much jealousy. Owen was very angry, but has cooled down, and is again amiable. Clift was vexed, and continues so, but chiefly because Mr. Hunter's preparations are no longer to be kept separate from the rest. Mr. Stanley's and the other Hospital-apprentices are in dudgeon that he did not give them a task for which they are all wholly incompetent, with the exception of one man who is not anxious to have it. However, all this will doubtless come smooth again; I should not have thought the work or the pay worth quarrelling for; nor was either of them carefully sought by me.

3. *March 21st.*—On looking over the medical list in A which has fallen in, the only names I can find of men whose biographies you would write are Alibert, Armstrong (John), and Avenbrügger. The rest are men of no eminence or interest whatever, and such as none could tolerate the study of, except under the pressure of the strictest necessity. I fear you cannot look to the 'Biographical Dictionary' for the payment of your income-tax: the names are so numerous that those of Doctors are too thinly scattered to make the temporary fortunes of their immortalizers. *April 28th.*—There is a book will tell you much more than you want to know of Alibert's writings—Callisen's *Medicinische Schriftstellers Lexicon*—a very treasure to modern biography-writers. In return, I have a question to ask you. I find, by repeated measurements, that the old rule about the branching of arteries—namely, that the sum of the areas of sections of the branches is greater than the area of a section of the trunk—is not always true: there are many examples of the contrary, but the relations are pretty nearly the same in all bodies: that is, in some parts the stream by branching always becomes larger, in others always smaller. I want to know what must be the effect of these alternate dilatations and contractions upon the course of the blood. *June.*—I have received high compliments from Dr. Forbes for my report, which he calls 'a marvellous monument of learning and industry.' But I shall be surprized if I am not again disappointed with this Minute Anatomy: which I suspect will only pay, if ever, after a long time, by the reputation it may bring me.

4. *July 25th.*—I have sent by one of to-day's coaches two copies of my report, and of my last paper—one of each I hope you will keep, and the others I will thank you to send to Dr. Clark. This report will, I hope, do me some good: it has cer-

tainly gained me considerable reputation for extensive reading and for accuracy, and many have spoken to me very favourably of it. I have been so often asked, too, where it can be bought, that I shall ask Dr. Forbes to let me print it again and publish it separately; for by having it circulated more widely I shall gain more credit if not more money. The second smaller paper is not much; but, as it contained sufficient facts of observation, I published it to neutralize in some measure the notion, which the other might give, that I do nothing but read —which indeed would be very nearly a true one.

My demonstrations having gone off well, my pupils have proposed to make a demonstration in my favour, and have asked me if they may open a subscription to 'tea-pot' or commit some similar dignity upon me. After consulting Stanley and Burrows, I have determined this time to accept their offer (you know I thought it prudent to decline a similar one, two years ago), and they may do it as handsomely as they please. Independently of the intrinsic value of whatever they give me, the testimonial cannot fail, I should think, to do me good.

I am glad to say that I earned four guineas, at the least, in fees last week; and this from more patients than I ever before had at the same time. It was so long since I had taken one, that I almost doubted if another would ever come. All too were persons who had known me professionally before. All this has for a short time made the surface of the world look bright, and I can nearly think my excessive work will soon be unnecessary. From all that I can learn, and according to the coolest opinion I can form, my prospects improve both for the School and the Hospital; but I shall hold to them both loosely; for the chances of an opening are indefinitely distant.

5. *Oct.* 11*th.*—Our chief news is of the new season. I do not think there are more than half the number of new pupils that there were last year, and all is very dull. It is true that, on the whole, a small number of students have this year come to London, and some of the small Schools will probably be closed; but our deficiency is beyond all proportion greater than that of any other large School.

This looks bad enough, for one whose bread depends on it: but I am not sure that it is really a bad thing for me. The school can never fall so low but that I should be profited by being a Lecturer; and it is quite clear now that if they wish to keep the school above water they must take in working men, and those of that small class of which I am senior. It is

not easy to trace all the causes of this descent, but I believe, and have said plainly to some of the authorities, that the chief is in the anatomy department: there is, almost literally, no work done in the dissecting-rooms: after one o'clock, the dissecting-rooms are absolutely empty.

Affairs lately, I thank God, have seemed to be working towards a favourable change. Stanley told me a month ago that he, Lawrence, Burrows, and Roupell had decided to recommend to the Governors that my demonstratorship should be advanced to a lectureship, and that my pupils should pay me. They propose to do this before next summer. But this was planned before the season opened: now, their favourable intentions *may* find a better field to place me in. Lawrence too, in the opening address (got up this year for the first time) took occasion to speak very highly of me—this occurring in the presence of the Treasurer and Almoners may do me much good when my name comes before them; at the last *émeute* I was hardly known to them, and suffered in consequence. On the whole, therefore, I cannot but hope that next October I shall be in a better position than I am now; and most assuredly for my comfort's sake I need be, for my work is more nearly incessant than ever.

Very little of scientific medical interest has happened lately. I find rare treasures of morbid anatomy at the College, and am hard at work with the Catalogue; but the task seems the longer, the further I go in it. I have just finished describing 180 specimens of necrosis! Langstaffe's museum-sale concluded most lamentably; for nearly 2,000 preparations, which he valued at £2,500, he did not realize £250—not enough to pay for the descriptive catalogue which he had printed. He is therefore added to the long list of those whose museums have at the last proved their miseries. The bottles would have sold for more, if they had had neither spirit nor preparations in them.

In return for my learning of Dutch, and analysing some Dutch works in Forbes' Review, I have been elected a *Correspondirender Lid van het Genootschap ter Bevordering des Genees- en Heelkunde te Amsterdam*—which will give me, if I like to put it on, a sufficiently long handle to my name. In English, it means Corresponding Member of the Amsterdam Medico-Chirurgical Society: and the conferring the title is at the least civil; especially as I have been paid already for the work I have done.

My 'Symmetry' paper is just published in the Med. Chir.

Transactions. Budd's rather overwhelms it; but I am fortunate, I think, in getting even a share of the credit for the discovery, for he had certainly begun to work it out before I did.[1] It will do me some good: for these papers are abstracted in almost every journal, and are profusely advertized.

He apologises, at the end of this last letter, for his 'egotism.' But it is no wonder that he was watching the effect of every stroke of work, and calculating the weight of every word that was said about him: for he had come, by this time, almost to the end of his power of endurance. And this business-like spirit was not an abiding part of his life; it came of the troubles at Yarmouth and the hostilities at the Hospital, and did not outlast the difficulties that it enabled him to conquer. In the later years—unless it were now and again in the advice that he gave to young men in want of success—there was not a trace of it.

[1] The two papers were read at the same meeting of the Royal Medical and Chirurgical Society, on Dec. 14th, 1841: (i.) 'On the relation between the Symmetry and the Diseases of the Body.' By James Paget, M.R.C.S. (ii.) 'On Diseases which affect corresponding parts of the Body in a symmetrical manner.' By William Budd, M.D. All his life, especially in his study of the colour-changes of faded leaves, he loved this 'symmetry of disease'; the natural evidence of the exact chemical and structural correspondence of the parts diseased. He used to point out that Hogarth, in his cartoons at St. Bartholomew's Hospital, has painted a case of symmetrical disease of the skin, doubtless a Hospital patient, among the sick folk at the Pool of Bethesda.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY.

VI

PROMOTION. LECTURES. 1843–1851.

In the Session 1842–43, the School had fallen to its lowest level: only 36 students entered for the lectures on Anatomy, and there could have appeared no hope of improvement unless by some great change. Happily, the two most promising changes were just those most advantageous to myself.

The time had come—in fact it had long ago come—when it was necessary to separate the teaching of Physiology from that of Anatomy. The separation had been made some years before at University College, and at the Aldersgate Street School, the rival neighbour of St. Bartholomew's, and in some other schools. It was now resolved to make it at our's: and my election to the Physiological Lectureship was sure. The plan was to have a Lectureship on Descriptive Anatomy, and another, equal in rank and pay, on General Anatomy and Physiology: to abolish the lectures which had been called Anatomical Demonstrations, and to continue the appointments of two Demonstrators, who should teach in the rooms. Here was my good fortune. Several of those who had been Hospital-apprentices were fit to be Demonstrators or Lecturers on Anatomy: but not one could profess himself ready to lecture on Physiology; not

SIR JAMES PAGET

(From a Lithographed Portrait by Mr. Maguire, 1849)

one had seriously studied it. My election was therefore almost unopposed: the only other candidate was Mr. Smee, but he had held no School-appointment, and had a general, rather than an appropriate, reputation.

The election to the Anatomical Lectureship was not so easy. Stanley had resigned, and the candidates were Wormald and Skey. Wormald was deemed sure; but Skey was elected. Some excitement followed, and many of the students protested; but no change was made. He and I were to lecture; and Holden and William Ormerod were appointed Demonstrators.

The change was thus greater than was at first intended: for Skey had been the chief teacher in the neighbouring school in Aldersgate Street, and his withdrawal from it was soon followed by its final decay. There is now, I think, no complete private school of medicine in England: there were then several in London, called after their localities or their chief teachers—Skey's or the Aldersgate Street, Grainger's or the Webb Street, Lane's or the Grosvenor Place—and there had been the great Windmill Street School, where the Hunters and Brodie and Hawkins and other strong men had taught. They were decaying, as the Hospital-schools were becoming more vigorous and finding more occupation for those on their staff who were disposed to teach; but they were still influential. The teaching in them was cheaper than in the adjacent Hospital-schools; in some respects it was better, more personal, with more systematic cramming; and there were always

among the teachers some of high repute. Lawrence had lectured at the Aldersgate Street school; and with him Wardrop; and after them Pereira, Marshall Hall, and Todd.

It was a good thing, in every way, that Skey was brought from the rival school. He was one of the Assistant-Surgeons of the Hospital; and peace was hardly possible while he was in open competition with his colleagues. Besides, he was at least as good a teacher as Wormald, and was popular with many, and not very difficult to deal with—a warm-hearted, impetuous, generous, and careless man. His anatomy was of the older sort, and he had not time even if he had inclination to modernize it: for his ambition and necessity combined to make him very anxious for surgical practice. We worked pretty well together, and though we seldom quite agreed we never quarrelled.

In this same summer of 1843 another change was introduced for the repair of the gravest defect in the management of the School—the want of supervision and guidance of the students. There was really none, and a serious case had lately occurred, in which the son of an old pupil who was intimate with several of the staff had spent his whole time in dissipation, and gone utterly to the bad, without a word of warning or remonstrance. Many students, no doubt, had done the same; but this case was not overlooked, and all felt that 'something must be done.' The something was to be the institution of the 'Collegiate System,' and I was to manage it.

I think that the first who suggested, and urged

in print, that medical students should live in houses in or near their Hospitals, in which there should be rules of conduct and some supervision, after the manner of the Colleges in Oxford and Cambridge, was the Reverend Mr. North, then Chaplain to St. George's Hospital. I was engaged to his sister, and we often talked of what might be done, and spoke of it to our friends at both the Hospitals; and in 1841 he printed a letter to the Governors of St. George's, urging the plan on them. It was not then adopted by them; but we did better at St. Bartholomew's, where it was generally approved by several of the medical officers, and, yet more happily, by Mr. James Bentley, the Treasurer. He was a truly admirable man; an example of that admirable class, the rich merchants given to good works; men who make money with great care, and give it away with as great liberality; men who are exact and orderly in business; sometimes even exacting, when those they deal with are not needy; winning money as keenly as others would win games at cards; counting their money as the fairest estimate of their success in a difficult and honest competition; but, once counted, giving it freely, and with it giving their time and strong will and knowledge to the management of great charities. There were, as there still are, several of the kind among the Governors of St. Bartholomew's; and Mr. Bentley was the best among them: rich and still making money as much as if he wanted it for himself, generous, pious, rigid, requiring everyone's whole duty to be done, resolute for everything that he

thought right. Under his rule some of the greatest improvements in the buildings and arrangements of the Hospital were made. The earnestness which he showed in the endeavour to make them, even at great expense, as good as possible, was a novelty at that time: it has been nearly habitual ever since.

Thus it was decided to establish the 'Collegiate System' at the Hospital; and I was to be the first Warden. Mr. Bentley associated with himself in a College-Committee a few of the Governors, including the Reverend Dr. Russell, who had been Head Master of the Charterhouse and was now Rector of Bishopsgate, and very useful for this purpose. Help was given, also, by Mr. Joshua Watson and Mr. Robert Hichens, both excellent Churchmen, and by Mr. Wix, the Hospitaller, who, old as he was, promised daily morning prayers in the Church. Six houses in Duke Street, which would, probably, have been pulled down if they had not been convenient for this purpose, were cleared out, repaired, and furnished; in the place of another house, a kitchen and dining-hall were built; and arrangements for the supply of food were made with the managers of the Albion, one of whom became what Dr. Russell insisted on naming the *Manciple*. Thus something like a College, for 23 students and a Warden, was prepared; and I drew-up the rules, which were approved by the Committee, and went into residence just before October, 1843. All the rooms were soon filled; and everything made good promise.

It is not possible to tell the good that the College may have done in the forty years since it was started, or what share is due to it of the constant improvement of the School since that time. But I am quite sure that its first influence was extremely good.

It introduced at once that of which the want had been the great defect of the School, a plan for the general supervision and guidance of the students: for, although the Warden was not responsible for any but those resident in College, yet any one could come to him for advice. Soon, nearly all did so; and being always in the Hospital he soon knew everybody, and was at least supposed to have an eye on all. It was no longer possible for any one to be thoroughly idle or thoroughly vicious without being observed. Besides, the maintenance in the College of a certain discipline in respect of hours for coming-in at night, of behaviour in Hall, the control of the supply of wine, and the breaking-up of noisy parties, and an occasional expulsion for gross misconduct, had a much wider good influence. It settled a better standard of general conduct; and, if the good were not made better, the bad became less bad.

Gradually, also, it became the duty of the Warden to advise nearly all students as to their course of study. It was especially so for those just entering; for his living in the Hospital made it very convenient that all students should be entered by him; and thus he came to receive nearly all fees, and to keep the School-accounts and be, practically, the treasurer to the School. The improve-

ment in both finance and education was, I think, very marked.

In another respect, the institution of the College had a notably good influence. It led to the Governors taking a constant and friendly interest in the School. Under Mr. Bentley's guidance, many of them began to feel that they had a personal relation with it, and were affected by its success: they became persuaded that the best security for the complete utility of the Hospital is in the just prosperity of the School. Of course, many things contributed to this: the jealousy and suspicion, with which everything used to be hindered which seemed likely to make the Hospital useful to the School, had been diminishing; the School had become rather more than tolerated; in the institution of the College, the Governors seemed to commit themselves to a responsibility as for something of their own.

Thus, the School seemed to make a fresh start; and, as if by one step, I was raised from the worst to the best place among the teachers. If in any of my years of waiting I could have chosen my place, I should not, in the same time, have attained a position so good as that to which the course of events had now brought me. It was one for which all my previous work had been preparing me, and in which I could enjoy to go on working hard. And I was without a rival; for no one, at least on the surgical side, cared for what was then modern Physiology; and no one else, I think, would have been Warden in the College. Both places looked

like ways out of practice; and even my rivals would have put me into them.

For the next eight years, 1843 to 1851, I lived in the Hospital; at first in rooms, and then in a small house in the College. During this time I was constantly engaged in the care of the College and of the general business of the School, and in the preparation and maintenance of my course of Lectures: to which were added, in 1847, the work of the Professorship of Anatomy and Surgery at the College of Surgeons—which I held for six years—and the Assistant-Surgeoncy to the Hospital. I gave up all writing for Journals; but wrote many papers. In 1846, I finished the Catalogue of the Hospital-museum, of which I still had the chief charge; and in 1849, the Pathological Catalogue of the College of Surgeons, at which I had worked nearly every day for seven years.

The change in the method of my daily life was complete: the contrast more and happier than I can now bring clearly to mind. I had been very lonely for nearly seven years: now, I was never what is called 'alone.' Till now, I used to have my meals 'any how'; dining alone in chop-houses, or in my own rooms with the monotony of the same joint for three or four successive days; very rarely dining out, except on Sunday. Now, I dined every day in Hall with twenty or more students—the seniors, or any holding office in the Hospital or School, sitting at an upper table with me—always with excellent and various food and constant talk on Hospital affairs, or science, or the day's news. And every one came to my

rooms to talk of whatever needed doing. Besides, in May 1844, I married, and began to enjoy that happiness of domestic life which has already lasted without a break, without a cloud, for 39 years. From this time, the 'being alone' was the being alone with one who never failed in love, in wise counsel, in prudence and in gentle care of me. With her it was easy to work and be undisturbed by anything going-on around me; a habit which I can advise every one to learn. Her admirable music and her singing, with a matchless gentle voice and a pure cultivated style, were a refreshing accompaniment to my evening reading and writing; and when these were over, she wrote for me, copying for the press my roughly written manuscripts, sitting with me till midnight or far into the morning, all alone, or, after a time, with the baby brought down in its cradle and watched and fed.

I can recommend the plan to all young married people. It is an intensely happy one and may teach them to be able to work in the midst of what are commonly called interruptions. I owe to it that I have never once needed to leave my family or any tolerably quiet party of friends in order to work alone or undisturbed; whether for writing, reading, or any other similar work, no kind of good music or talking has ever interrupted me: I have thoroughly enjoyed them even while at work.

But the care of the College was not all pleasure. I took pains to induce some of the best students to be among the first residents, and

several complied, including Kirkes and others now gone but not forgotten. But there were, from the first and always, students of all classes; a few idle dissolute fellows whom I had to get rid-of by persuasion or compulsion; others, well-meaning but noisy, time-wasting, troublesome, fond of wine-parties and loud singing, who had to be gently managed, checked, advised, threatened; others, mere triflers, half-willing to work but half-ashamed of it, and not knowing how; always wanting guidance and encouragement, seldom improved by it. All these and others of such kinds made my work at times very anxious: I had to control their expenses for wine and other extras, to break-up their noisy or late parties, to 'have them up' when they came-in after the fixed hour; to rebuke coarse ill manners; to correspond with some of their parents and guardians; to persuade, advise, encourage. Such work would have been intolerable, but that it was made lighter by the pleasure of having about me a majority made-up of some of the very best of students; men whom it was complete pleasure to teach and talk with, and to see prosperous and successful, and to be able to help to good repute.

I cannot tell what influence the Collegiate system had on any one student; but its whole influence on the School was, as already said, excellent. It gradually led to the School becoming what I believe it still is, the best managed in London; best, that is, in order and quietude, best in *esprit de corps*, in freedom from unnecessary interference of Hospital Governors or officials, best

in the care and guidance of the students. But seven years' work of this kind was enough for me: I grew older, but the pupils in succession did not the maintenance of rules became tedious, the anxiety greater; a noisy party, with singing late at night and 'chaffing' of the people in the street, became almost intolerable; and I was glad to have good reason for resigning—the reason, namely, that with children increasing in number it was plain that the income would not be sufficient for their comfort and due training. For this it was essential that I should go into practice where my brass-plate might be in a better place than in Duke Street, Smithfield.

My wife has always remembered a conversation with Kölliker, who was admiring my opportunities for scientific pursuits while I was living at the Hospital. She told him we were about to leave, and he asked why. 'Chiefly because we cannot earn money enough for our family.' And he asked what was our income? 'About five or six hundred pounds a year.' 'And is not that enough?' he exclaimed, 'enough for a man of science?'. She said 'No'; and she was right, though this was more than 30 years ago.

LECTURES.

I cannot form a fair opinion of my lectures on Physiology. They were well attended and perfectly well listened to; though I lectured every day for six months:—that is, five days in each week on General Anatomy and Physiology, and on the sixth

day on Morbid Anatomy, after the same manner as in the Demonstrations which I had given before I became a lecturer—and though nearly every student had to attend at least two courses of six months each. They contained extremely little original matter; scarcely, even, any original thought; for many things, beside my own inclination, combined to make me prefer researches in Pathology. But I read what is vaguely called 'everything'—continuing the same kind of work as for my Reports on Anatomy and Physiology, and maintaining the ability to judge fairly of the merit and novelty of what was published, and the power of condensing. Besides, so far as I could, I tested much of what was written, and worked with the microscope and repeated the less difficult experiments. I thus kept on a level with all but the best knowledge of the day, and in advance of the teaching of Physiology in most of the Schools in London—no great achievement, considering the state of physiological teaching at that time.

My lectures supplied nearly all the materials for the first edition of Kirkes's Physiology. He was one of my best pupils: clear-headed, industrious, as resolute in work as he was gentle and pliant in goodness in all his social life. The early editions of this manual may show what the lectures were in material and extent: but I cannot doubt that they were chiefly attractive by reason of the seeming facility and the fluency with which they were given. I always had the power of what is called 'extempore' speaking: I do not remember to have ever been without it or to have had more

trouble in it at one time than at any other in my life—indeed, I do not remember that so far as the merely speaking continuously and fluently was concerned I ever felt any difficulty at all: the only difficulty was in the getting what was worth saying. This facility of speaking had so great influence on my career, it helped to gain for me so many appointments in good repute, and was judged to be a sign of so much more mental power than it really implied, that I may venture to say more about it.

The mere power of speaking fluently was a natural possession, neither acquired, nor in itself cultivated or, so far as I know, improved. Happily, I never misused it in any readiness to make speeches in public or after dinners or anywhere—indeed, I never in my life attended a really public meeting, or gave a lecture on any other than a scientific or partly scientific subject. And I never spoke on any considerable occasion without careful preparation. Thus, for any important address, such as the Hunterian Oration, that at the International Medical Congress, the Bradshawe Lecture, and the like, or even for some speeches after dinner, such as those at the Royal Academy, I used to learn, as nearly as possible, every word by heart, writing them carefully, and often more than once, and sometimes speaking them in portions for some days previously. On occasions of less importance, I used to learn by heart the chief parts of each lecture or address, and to form for other parts a general intention of what should be said, and trust for the words to the thought or

impulse of the time. In short, according to what seemed to be the importance of the occasion and the need of care, so did I prepare myself: at the worst, as for ordinary clinical lectures, trusting myself entirely to the power of thinking and speaking at the time; at the best, preparing every word long before, and learning, if I could, every word by heart.

I think that this use of various plans adapted to various occasions may well be recommended to those who wish to be, or to seem to be, extemporaneous speakers. On important occasions, words should, of course, be very carefully chosen; sentences very carefully constructed; more so than seems possible without previous arrangement and frequent revision: for occasions such as these, there should be the same care for what is to be said as for what would be written. But there are few, I believe, who trusting to memory alone will not sometimes, while speaking, forget or be in doubt, and falter, and be in danger of breaking-down, unless they can fall back on a habit of speaking off-hand and can thus continue to speak till they recover their exact recollection. For safety in this resource all should practise, when they fairly may, the speaking without notes and with little preparation: the consciousness that it can be done in case of need is a wonderful help to the memory, in that it diminishes the fear of utter failure.

On the other hand, the habit of careful preparation for lectures, or addresses is of the highest importance for the cultivation of accuracy and

clearness of expression; of not less importance for speaking than it is for writing. And in both cases, alike and equally, it has a good influence far beyond the occasions on which it is specially used. He that often does a certain work very carefully will seldom do it without care; it becomes constantly more easy to do ordinary work well: and, even in the carefully choosing words for speaking, the habit of thoughtful choice increases not only the store from which to choose but the power of swiftly choosing the best for the purpose in hand. Indeed, as between speaking and writing, the choice of words for speaking seems to me the more important. A reader can take time to think what a word or a sentence means: a listener can not: to the reader there is no sound, to the listener the sound may be either pleasure or annoyance, attracting or disturbing his attention.

It would have been folly thus and here to have written on speaking, if this art had not so much influenced my career, and if it were not probable that of those who may read my memoir many will depend, in some measure, for their success in life on their fitness to be lecturers. The sum of my advice to them would be that, if they wish to speak extempore, or to appear to do so, they should practise both the reality and the appearance; and, when they have a choice, the appearance rather than the reality. But I repeat 'If they wish': and they had better be quite sure that the wish is a prudent one. It is not prudent to wish for it, if it cannot be done more than 'pretty well': for 'pretty good' extemporaneous speaking is hardly more

pleasing than are pretty good eggs. And it is not prudent to wish for it, unless its dangers can be resisted: for the power thus to speak is a very dangerous one; it tempts to the great risks of public and parochial talking; to the wasting of time and attention in the giving of frequent popular lectures; it gives an appearance of cleverness and even of utility to any shallow nonsense; it encourages carelessness and inaccuracy. Thus it may be a power for mischief, even more than for good, to him who possesses it: and unless a man can be sure that he can resist the evil and work only for the good that is in it, he had better not try to gain it. Many of the best of teachers have been readers: let him try to imitate them.

I believe that I escaped these dangers by reason of being averse from common publicity, very sensitive to ridicule and inattention, and very anxious to be in good repute with the best judges. These things made me, on all but the commonest occasions, very careful, fearful of failure, anxious and often very nervous. I could conceal my nervousness but it always weighed on me and made me unwilling to speak on any but necessary or adequate occasions.

I have implied that my ability to speak and lecture had an unreasonably good influence on my career. It helped to make people think me fit for things for which I was, as yet, not nearly fitted; it was thought 'clever,' and the merit of cleverness is exceedingly over-rated. It certainly helped to obtain for me the election to the Assistant-Surgeoncy in 1847—for which I had no other

claim than that I was useful to the School, and evidently ready to work hard in anything that was given me to do.

The contest for the appointment was very sharp. The senior candidate was Mr. William Pennington, who had been an apprentice of Mr. Stanley, and dresser and House-surgeon; a fine-tempered, generous, and light-hearted man, with no ambition of success; admirably fit to be the country-gentleman he became soon after the election. It was hardly of his own will, indeed, that he was a candidate; but he had to please his uncle and do his best. His uncle was, indeed, a remarkable man, such as now, I suppose, could not be found in the profession. It was told of him that he came to London as a mere boy, with his father, who was bringing a patient to Perceval Pott. They were riding to town, he behind his father; they were thrown, and the father was severely injured, and died under Pott's care. The boy was left desolate. Pott helped him to study with an apothecary; helped him to start in a little practice; and by his own cleverness, incessant work, and impressive manner, he became one of the busiest and the most influential of the general practitioners of his time. He helped many to prosperity and to station higher than his own; and he had resolved that his nephew should be on the staff of the Hospital to which he owed much of his own success.

My other opponent was Mr. McWhinnie, who also had been an apprentice of Mr. Stanley's, and for several years demonstrator of anatomy, and

more recently lecturer on comparative anatomy. He was a worthy, gentlemanly man, accurate and kindly, a very pleasant companion, and in respect of surgical knowledge more fit than I to be assistant-surgeon, for he had been dresser and House-surgeon, and was fairly well read. But he was not active, not laborious, not ambitious; he had done no kind of scientific work, and had not done much for the School.

It was a sharp contest, and the canvass was long and complete enough to enable me to become very conscious of a relation to a number of one's fellow-men which nothing else can teach and which every one should learn. Nothing can better teach humility, dependence and deference of manner; nothing can give so good an estimate of the amount of pity to be bestowed on a gentlemanly member of the House of Commons. I was elected by a considerable majority; for the President, the Treasurer, and a great part of the most influential Governors supported and worked for me; and, among the medical officers, Lawrence, whose influence was immense. The rest of the staff were divided or neutral; only one or two worked against me.

This same year I was elected, to my great surprise, Professor of Anatomy and Surgery to the College of Surgeons. It was a great and rare honour: for the rule had been that some member of the Council should hold this professorship. The work that I had done in the College Museum seemed to justify departure from the rule, and determined the subject of my lectures—for which,

in the six years from 1847 to 1852, I took General Pathology, as illustrated in the first portion of the Museum. The lectures were all largely attended, and helped to bring me into good repute further beyond the range of the Hospital than I had been hitherto. They were published in the 'Medical Times & Gazette' in the successive years in which they were given: and, after revision, were published in my 'Lectures on Surgical Pathology.' I cannot tell what, if any, good they did to others as well as myself: but as I look at them now, more than thirty years after they were delivered, they seem like a fair illustration that Pathology has made more progress in thirty years of this century than in the whole hundred of the last.

COMMENTARY.

January–August 1843.

The chief events of these last months at Serle Street were his appointment to be Lecturer on Physiology at the Hospital, and his appointment to be Warden of the newly created Hospital College. On March 7th, he and William Ormerod submitted to the Collegiate Committee of the Hospital a preliminary report, on the expenses of London lodgings; that the Committee might decide the prices of rooms, food, and so forth. Part of this report may be of interest to present students. The cost of 'diggings,' sixty years ago, was from nine to sixteen shillings a week: coals, two to four shillings; attendance, a shilling:—

All Students take Breakfast and Tea in their own Rooms. They buy for themselves Tea, Coffee, etc., and are provided by the Lodging-house Keeper with Bread, Butter, Sugar, Milk, etc., according to their need. Nearly all the students lunch, in some way or other; the great mass at the neighbouring Baker's, and the remainder at the Public-house. The meal consists, with the majority, of biscuit or bread in some form, with

pastry; whilst those who go to the public-houses resort there more for beer than food. The common expense of a student's lunch is about twopence per day—this is applicable only to those who do not drink Beer, the expense of which in most cases nearly equals half the sum expended in dinner, or about fivepence: the expense of lunch to the more industrious thus amounting to about a shilling per week, whilst that of the students who resort to public-houses is about half-a-crown per week, if they attend regularly. For dinner, nearly all students dine at chop-houses, and their daily expense of dinner varies from ninepence to eighteen pence, the average being about a shilling. For this they have the common advantages of the coffee-room, papers, etc.: and for dinner a plate of meat, or a steak or chops, bread, potatoes, cheese, and usually a pint of beer. Very few of them take more than this, or remain in the Coffee-room after dinner.

The date of his appointment to the Lecturership on Physiology is May 30th. His testimonials were from Professor Owen, Sir John Forbes, Mr. Long, Professor Clark, Professor Carpenter, Dr. Latham, and Dr. (Sir George) Burrows. On the day of the election, his brother Frank was at Serle Street; and wrote home an account of it:—

3, *Serle Street, Thursday,* 3 *o'clock.*—Dear Father,—I shall address this first part of this Note to you, as the head of us all, to congratulate you first, and pray convey my congratulations to all at home. Little did I think I should be near the scene of excitement, by Jove—James last night told me, for the first time, that *to-day* was to be the day, and showed me the Note from the Treasurer about the Meeting that was to make his fortune or to ruin him for ever, as he said—Well, I need not say I was unhappy as to whether I should stay at home or go abroad, but however he said I had better go, he having no idea at what time it would be over—well, I am in now, and I insisted upon drinking his health, doctors here or doctors there, as the Lecturer of Physiology. Oh how thankful ought we to be to God for his goodness for this piece of good fortune. James says over and over again, 'Make much of it; my fortune is made'—Pray God he may enjoy it long, as he is a glorious fellow, and happy and proud am I to have such a brother. We shall pilot the Old Ship thro' now. Am I not lucky to be the first to write home about it?

Many letters of congratulation came from home; and from his old master, Mr. Costerton, and from George Paget and George Murray Humphry at Cambridge. His father writes to him, 'We all pray God to preserve your health, and to accept our hearty thanks for his infinite goodness and mercy to all of us. The appointment is I am sure a most valuable one, and, to so young a man as you are, a most unusual thing: and, with your popularity as a Lecturer, you and all of us may well think much of its future advantages. The Medical Officers of the Hospital have behaved most admirably to you; and in this business, in carrying-out what they think will benefit the establishment, have shown their respectability, and how much they are above being swayed by the jealousies that might have arisen against you. Again and again, my dear James, let me congratulate you.' And at the end of the letter, in the feeble handwriting of one paralysed, his mother adds her message—'I say Amen to all the above.'

In July, the Collegiate Committee had to decide who should be Warden. In their minutes, they say that they 'viewed this question with considerable anxiety.' For the little College was not to be only a row of lodging-houses; it was to wear, in spite of its cheapness, something of the air of Cambridge or Oxford, with its daily chapel, and high-table, and rules of discipline. The spirit of an University-settlement was to be in it; and Duke Street, Smithfield, was to blossom as the rose. It was a 'movement'; it had its inner meaning. Nobody could foretell what would be the result of this bold venture to raise the School: and, if it failed, the School would be half-wrecked. But at once, without a shadow of failure, it achieved success: and with the rise of the College came the rise of the School—whose present greatness belongs to history, and not here.

On August 8th, Paget was appointed Warden. Then he went home for a few days. His father's business was failing, the Brewery was to be sold, and his brother Charles was hopelessly ill. He writes that, if it were not for his younger sister, the house would hardly hold together. On Sept. 28th, he left Serle Street, and took rooms in the College. Everything was made ready for a good start: the Treasurer gave £100 for a Library; Mr. Joshua Watson gave £50 for books 'by which the moral

and religious principles of the students might be established'; and it was proposed, but happily not carried, that caps and gowns should be worn by the men in College, and that the Lecturers should be called Professors.

Last Letters from Serle Street. January–August 1843.

i. *To George Paget.*

1. *March 7th.*—Our Collegiate establishment is making progress. Ormerod and I sent in our suggestions regarding all the domestic matters to the Treasurer to-day, and I have little doubt they will be adopted. Indeed, for all these minor matters I shall probably be able to get any plan followed that seems best. I cannot help thinking seriously of taking the Warden's place, if they will give me pretty good terms.' I cannot see any road to an increased or comfortable income for many years to come; and all the reasons which I mentioned when you were in London seem to grow stronger. I have spoken to Burrows, and he thinks I might do well in it, and might very well continue to practise. I shall certainly look out for this; for without this were granted the risk would be greater than I think I could wisely run. *March 17th.*—I am miserably unable to give much present assistance (to those at home). With all my work, I can barely earn enough to keep me in my profession: this year, I fear I shall not earn enough for it. I will continue strict economy, and give what I can save, but what may happen is so uncertain. There is some security, in case of my death, in the money for which my life is ensured. *April 7th.*—I am very sorry to have so poor an account of your health. Heaven knows one needs strength to meet all these anxieties, and may Heaven grant it to you and to us all. Alfred's friend has taken the rooms over me[1]—a merry fellow enough he seems, but not the pleasanter for that, when there's a floor and ceiling between us. I have had part of the Editorship of the Gazette rather pressed on me again,

[1] *To his brother Alfred, April 1st.*—'I called this afternoon upon your friend, whose acquaintance I am happy to possess. I would of course rather not know the man who lives in the same house with me, and I have hitherto diligently cut my fellow lodgers; but he, I daresay, will prove that my rule ought to admit of exceptions. He appears a faster man than those I am accustomed to: but perhaps he thinks I'm fast too, and therefore assumes unusual manners.'

but, deep as my need of money is, I thought I had better decline it, though it was the easiest, and in money the most profitable, work I ever had. There is little stirring. Changes are still hinted-at at the Hospital, but I can get no definite notion what they will be.

2. *April* 17*th*.—The changes I anticipated at the Hospital have begun. Stanley, on Saturday, resigned his Lectureship!! Wormald, with whom in the last two years I have been gradually growing more cordial again, called on me this morning. . . . All that is certain is that Stanley has resigned, that this resignation is *bonâ fide*, and that Wormald promises friendship. Though I certainly stand much better than I did two years ago, I will not be confident that I may not lose ground. The apprentices of course will do their worst: and, as in a law-suit or an operation, there is always danger in the best of cases. It is rather in my favour that Ormerod—one of them, and the only good one—has just got the Jacksonian prize; which has determined him, more completely than hitherto, to stand on his own merits and throw over all his privileges as an apprentice. *April* 25*th*.—I have a difficulty in answering about this letter from home: because it is nearly impossible that in the next five or six months I should earn enough for my own maintenance. If I do not get the Lectureship, I shall be at a shift for bread: and, if I do, I must at once give up all or nearly all writing for immediate profit, in order that I may have time to prepare my 100 or 140 lectures. In either case, I shall have to borrow for my immediate necessities. It comes therefore to the old tale—I have none of my own to give, but I do not mind borrowing of Peter to give to Paul. *May* 18*th*.—All the testimonials I have yet received are good. Forbes has written a very blaze of praise: George Long's hardly falls short of it. I hope to spend a day or two in Cambridge in the summer, if I am made lecturer—for I shall then make a kind of tour for orders or pupils—but at present my demonstrations and other work must detain me. I am writing, for the 'Biographical Dictionary,' the life of Arnaldus de Villanova. *May* 30*th*.—I received the bond this morning, and I will sign it, and send it on, this evening. These are indeed serious responsibilities that we are taking upon us; but to-day I must confess I bear them lightly, for the Committee have just confirmed my appointment to be Lecturer on Physiology. As a matter of form, it must pass the General Court: but *there* no change is at all likely to be made. I may consider myself Professor. This is a very happy event, and I

heartily thank God for it. *June* 21*st*.—The College of Surgeons, I am happy to say, voted me £100 yesterday (for work on the Catalogue) and I thank God and them for it; for I never was, both in money ready and money due, so poor as at this time. I am glad to say I have made my Hospital arrangements to my satisfaction. Skey will take the expenses of the dissecting-rooms, and I those of the Museum—I calculate that mine will be about £160 a year: this is rubbing a good deal of the gold off the gingerbread.

3. *July* 10*th*.—Our Hospital-College affairs are now being considered again. The Medical Officers have expressed a general wish that I should take the Wardenship, Deanship, or whatever it is to be called, which implies the management of the College: and I have consented to do so, if some fair conditions can be granted me. . . . The success of the School now depends much on that of the College; and, if I do not take the management, one more unfit than myself might do so. I do not think I should have less practice there than here; and, though I should insist on having my name up on a door, it would rather be to avoid appearing to have given up practice than with any hope of getting much. And there are chances that I might get other things at the Hospital, such as a resident-surgeoncy. On the whole, I can see no great objections against my going to live there—whether in Bartholomew Close, or a quiet house in Smithfield, or elsewhere close by: and I can see many advantages: not to mention that I have a taste for the work, and should not at all mind (if I had a fair prospect of living by teaching and Wardenizing) giving up practice altogether.

ii. *To Miss North.*

1. *March* 15*th*, 1843.—I have done nothing in the matter of the Wardenship—but I find that the Treasurer, taking his notions probably from Stanley, thinks a senior pupil will do. I heard him say something about two rooms being wanted for the Warden, who would of course be an unmarried man. Poor gentleman! *nous verrons*—there's time enough to think about this, however. . . . I spoke long and effectively in favour of the babbies the other night: and in future—as Dr. Cuthbert might say—the streams of Dispensarial mercy will no longer be frozen-up when the children yet unborn would drink of them. *March* 22*nd*.—My only unusual proceeding last week was the spending an evening from 4 to 12 in the House of Commons,

and hearing Lord Palmerston, Sir R. Peel, Mr. Macaulay, and Sir Howard Douglas divide more than 7 hours between them in speaking on the American treaty and the merit or blame to be assigned to Lord Ashburton for making it. It was on the whole interesting—yet I received no impression of wisdom so great as the wisdom of our Church in offering daily prayers that God would direct the deliberations of these persons—there is a confusion, a party-feeling, a parade of speaking, and a following of leaders blindly, which could not, left to themselves, issue in any good. The speeches were on the whole good and characteristic: Lord Palmerston's as clear and plausible and clever as if, had the business been left to him, nothing could have failed—though it is notorious that he alone, of those who were engaged in it on the side of England, did mischief or allowed it to be done: Macaulay's abundantly fluent, but wordy and almost unimportant: Sir R. Peel's convincing, but wandering and over-burdened with attempts at dignity of style and impressiveness—pompous just because it was not eloquent. However, these are three of the best speakers in the House; and, on the whole, each in his own style is certainly first-rate.

2. *April 18th.*—I passed Thursday evening at the Loughs, and we improved our minds in the intellectual games of Bagatelle and Bridge for about two hours—admirable occupation for reasonable creatures. Our winter season at the Hospital will end next week. Changes are certainly contemplated, but I cannot find out what they will be. I shall endeavour to pursue still the quiet honest course and wait for what God, by the hands of men, shall send me; yet it is hard now to avoid wishing and even reckoning on what may happen. . . . God guide *us*—for you are right in thinking that all my success may be counted as your own: but for you, and the joy I have in your happiness, and the pride I hope to feel in placing you where others may admire you, I should care much less for these things.

For the first time these six years, I have the acquaintance of my fellow-lodger. I had rather have had a stranger; for till it is under your control I do not expect my domestic arrangements will be fit for the inspection of a friend. My fat old landlady, however, is gone: that is a compensation. It is quite a comfort to me to be sure when I am going downstairs that I shall not meet her, for though she was as much afraid of my face as most cats and children are, yet it used to annoy me to see her clearing-off whenever I approached—to see too her

vile *déshabille* in the morning and her more vulgar finery in the evening. Oh! what I have passed through in my time—she was worse than a servant of all work. But I have come to the nonsense of my letter.

3. *August 8th.*—I am now waiting for a meeting of the Medical Officers, at which probably we shall settle something about my coming to the Hospital. For Friday, make any plan that will be most agreeable to yourself; that, of course, will be most pleasant to me by which we shall soonest meet; and the smaller the crowd around us at the time, the better I shall love them—even though their number be reduced to 0. . . . I have just been with the Medical Officers, and I have consented to reside in the College, from October to Midsummer. I shall take only two rooms, the same as one of the students, which I shall have rent-free: and I am to be paid £100 or £75, I don't know which. This is of course a very bad bargain—but as you know I am a very bad manager in such affairs. . . . I have said that if after next Midsummer they wish me still to stay, and will make arrangements by which I may live in a house which is likely to be agreeable to yourself as well as to me, I will remain. But this I think is not likely they either can or will do; and therefore we may hope (D.V.) to marry at Midsummer and to take up our abode—Heaven knows where.

September 1843—*May* 1844.

It is probable that the College will soon give place to a new College worthy of the Hospital. It has no outward dignity; it is a row of shabby little old houses, all just alike, looking into a stuffy dirty little street, along which, sixty years ago, sheep and cattle used to be driven at night to Smithfield Market. But, to make amends for its mean and impoverished air, it is set in the midst of famous buildings, and close to the magnificent church where the Founder of the Hospital is buried: the Hospital Square is the College Quadrangle: and the life of a resident in Hospital has gifts, to be had for the asking, as good as anything that Cambridge or Oxford can give. On October 2nd, 1843, with the Warden and sixteen students in it, the College was opened. Three days later, six more students were admitted; and by the end of the month all the rooms were occupied.

On November 22nd, at Yarmouth, his mother died

suddenly: to the last day of her life, she had kept her indomitable spirit, and had made light of her troubles:—

If there were one thing that would tell the history of the house, it would be my mother's handwriting from first to last: the bold tall characters of the early specimens, and the shaking defiant effort against nerves that marks the later ones, and asks me 'to excuse a steel pen.' I wish I could but for a moment recall any one of those single words with which she would deliver an opinion on the white slate, as if she gloried in having left her spirit among some and all of her children—how she would mock at her own infirmity of hand. A single word would display the wit, the pungent sarcasm, the daring high spirit that the heavy calamity of her illness had dumbed but left untamed within. Think of her strange mixture of generosity to the weak and defiance to the strong. . . .

The youngest of her sons, Alfred Paget, wrote this in his memoirs: and it may serve to show what heavy loss her death brought to her son in London. She died only a few days before he received the honour of election among the original 300 Fellows of the College of Surgeons, at the institution of the Fellowship, in December, 1843. He was one of the youngest men elected; and the Council chose this body of Fellows not from London only, but from the whole country.

On March 23rd, 1844, after long suffering, his brother Charles died. This put an end to all hope of saving the Brewery; and the negotiations for its sale were begun on the day after the funeral.

On May 8th, 1844, the Collegiate Committee of the Hospital received the Warden's first annual report, how the College had fared. Everything had gone well: twenty-four students were in residence, and had been comfortable, fairly quiet, and eminently successful in the Hospital-examinations. The extreme number of students, that could be 'safely admitted under existing circumstances,' was thirty. The Warden regrets that he has been unable to give undivided attention to College affairs—'having had during the last winter to prepare and deliver 140 lectures, as well as to carry on several undertakings in which I had engaged before my appointment.' And he makes this very handsome suggestion, that friends should be allowed in College till midnight; whereas

the rule had been that they must not stay later than eleven.

In the few instances in which there has appeared a disposition to break through the rules, it has been possible to enforce them. It was always felt, that the great test of the possibility of introducing a Collegiate System among medical students would be in the first applications of real restraint, either in reproof or in any more rigid measures of discipline. In these respects the Establishment has been tested every way; there have been occasions, not only for reproof, but also for the exercise of much severer measures; and no injury, but advantage, has in every case resulted. The application of corrective measures to those who needed them has given assurance to the others that their comfort and good reputation would be protected. There has also been occasion to observe, that although the rules of the Establishment are in no degree irksome to students of moderately good character, they are almost intolerable to those who are not well disposed. There have been bad as well as good; and some of all tempers and inclinations. . . .

The future success of the system should be rendered, as much as possible, independent of those by whom it is conducted; and especially of the Warden. The system cannot be considered safe so long as it depends (as it now in great measure does) upon whether the Warden be popular among the students.

On May 23rd, 1844, after an engagement of nearly eight years, James Paget and Lydia North were married, at St. Mary's, Bryanston Square, from her mother's house in Blandford Square. It was, of course, a very quiet wedding; and they had no honeymoon, save one day at Oxford—his first sight of Oxford, and he writes to his brother that it cannot equal the beauty of Cambridge—'except the collection of very old paintings given by Mr. Fox Strangways to Christ Church: they are beyond description interesting, fairly illustrating the progress of painting from about 1200 to 1450. Some other things at Christ Church, too, are very beautiful. But on the whole I could find none but the general views which could be compared with what I saw at Cambridge.'

For a few weeks they had rooms in College; then the Warden's house was made ready for them, and was

furnished at the charge of the Hospital. Among the students who began their Hospital-life in 1844 were J. A. Kingdon, Wallich, George Dunn, William Helps, and William Scovell Savory.

Letters from August, 1843, to May, 1844.

i. *To George Paget.*

1. *Sept. 23rd*, 1843.—Your account of Mr. B—— is not so satisfactory that I can say *unconditionally* that he will have rooms. There are already 20 applicants for the 24 sets—many of whom have received absolute promises—and there will no doubt be many more; so that now we are obliged to say to each candidate that provided his testimonials are unobjectionable, and the medical officers have not already disposed of all their recommendations, he shall have rooms. Heaven help me; each pupil I count like an additional burden of anxiety, though the prospect of success in so good a cause is very cheering. *Sept. 29th.*—I am sorry I cannot yet promise that Mr. B—— shall have rooms. There are already five candidates for the three remaining sets, all urgent, and he alone of doubtful virtue. His testimonial is so strictly equivocal, one word bad another good, that it has not at all benefited his case. I came in last evening; my rooms are very comfortable, but I am overwhelmed by occupations and anxiety. *Oct. 4th.*—I have seen nothing of Mr. B——, so doubtless he is gone to King's College. I hope this is not much to be regretted: I confess the *best* account of him frightened me, and I am rather glad not to have any charge of him. He will do now as the *one* rejected for doubtful character: we want an example, to make it appear that our rules are acted on. *Dec. 19th.*—You will be glad to hear that I am elected one of the 300 Fellows of the Royal College of Surgeons. It is some, but not a great honour—for the election of the *pures*[1] in London was not, I am told, general.

2. *April 19th*, 1844.—We are in all the dullness of a

[1] The 'pures' were the surgeons in consulting practice. The first meeting of Fellows of the College was on July 31st, 1844. 'About 120 attended, but there was not much amusement: for the Charter forbids any speeches except on the subject of the meeting; and, while they were cool, they all agreed that they would make none on the subject—the election of the three new members of the Council. The three elected were all very moderately good men, adding little honour to the Council, and giving no evidence of the superiority of the half-popular mode of election.'—*James Paget to George Paget, Aug. 1, 1844.*

vacation—only 5 men in the College, and they all listless. Mr. W—— is so superior to the great majority of medical students that if he would work he might make himself quite eminent—but he is one of the most thoroughly idle gentlemanly students that I have ever known. *April 29th.*—I shall be happy to see Mr. M——. For a man who is not disposed to work, there is probably enough to do here in the summer: he may attend the Clinical Lectures with advantage, and, if he likes, may attend to Botany or Practical Chemistry: I should recommend the last, for I find even the idlest men are rather fond of it. . . . I am expecting to be married at the end of May—I reckon that I shall be about as rich married as I have been single, and thank God my poverty has so little interfered with my health or happiness that I am not careful about submitting to the being always uncertain whether I shall have quite enough. *May 14th.*—Mr. M—— has entered to the Botanical Lectures here. I have little hope of his doing either himself or us any credit, for his only friend seems to be Mr. E——, another Caius' man, who has an equally bad reputation both there and with us: he came into our College, intending to reside, but before 24 hours I found it advisable to tell him I thought it would not suit him.

ii. *To Miss North.*

1. *October 8th*, 1843.—Nothing has gone on but business, and *that* has been incessant and intense. I never, I think, did more in one week: my first lectures are among the most difficult, and I have already found that notes prepared three months beforehand are of comparatively little avail at the time when they are most needed. However, I am thankful to say that I have thus far given satisfaction: my class is very large, including a great number of old students, and hitherto all have appeared attentive, though my subjects have not been by nature of the most interesting.

I cannot yet say how good or bad a school we shall have this year. If it be small, the raising it again will be a better work—and raised it can and must be. King's College will, as I expected, be the only school improved this year: it is the youngest, and is by many things just now well-favoured. Our own College has hitherto worked thoroughly well: I cannot tell you how thankful I am for this. I begin now to believe that it may be permanently beneficial, and to hope that I am the husbandman of a seed which in years will produce an

abundant harvest of good to men, and of acceptable service to God. The students seem well disposed to conformity both with the rules and with good manners; and if, after the habit of a week or two in this, I can only persuade them to work, the scheme with God's help is safe. But in nothing have I ever felt so thoroughly my own inefficiency as in this part of my duties.

I am surprised to find how soon the annoyance of the noise of Smithfield ceases—on both the last pre-market nights I have slept well. On the whole, I believe that, if the College can be carried on, we might look far for happier circumstances than those in which we may live here. My only doubt was whether the residence could be agreeable to you. I now think it may be so even in an unusual degree; though of course I cannot be sure of this, for the place has many attractions to me which you would not perceive.

2. *Nov.* 1*st*, 1843.—Late at night I begin to write to you, for I have just packed my head for lecture to-morrow morning, and according to my old bad custom I cannot persuade myself to do more than is absolutely necessary, though I know that to-morrow there will not be time enough to work for the next day. . . . All matters here work-on steadily. And when I speak of difficulties arising in the management of the College, these are only such as must arise in a society of 24 men of the most diverse dispositions, and many of them with the most obscure notions of the purposes of the place in which they find themselves. I begin to find that, like Judge Jeffreys, I have a rough side to my tongue, which I can now work almost as easily as the smooth one. I have succeeded I trust in reproof—*rowing* in good earnest, till a culprit even wept. But don't talk of these things: and I find (thank God) that the burden of them grows each day, by habit, easier.

So do *not* the lectures. I did wrongly to start so vigorously; for I must now try to maintain the same pace; and I am terribly put to it, to excuse all that is dry. However, happily, the congregation continues large. That at morning prayers is less steady—the men give no worse excuse than that it is hard to get up so early; and this will be difficult to correct, especially as I think it much better than any *conscientious* excuse against Church services. I am glad to say that I do not think there is a *strictly conscientious* man in the College: they are all therefore nearly manageable.

1845.

In February of this year came the sale of his father's Brewery, and of the adjacent property. His brother Frank writes to him :—

> Well then, the Brewery is sold. Thank God much is now over, the great thing off, the great encumbrances off, anxiety now relieved, character saved—thanks to God a turn of hope is come at the very last moment. We have made the most of unfavorable and unfortunate circumstances; and our thanks are due to you, for one, for your help in the hour of need.

They had hoped that the railway from Norwich to Yarmouth, which was opened in 1844, would greatly increase the value of the property. The Brewery was on the North Quay, with its back to the river Bure, and its face to the road; where the bridge crosses the Bure from the Vauxhall Station. It was pulled down soon after the sale, and its bricks were used for the foundations of a Roman Catholic church in Yarmouth.

At the Hospital, in 1845, the chief event was the institution of scholarships, to be awarded to students after examination. The Treasurer, Mr. Bentley, founded a scholarship of £50 a year for three years; and the Medical Officers and Lecturers agreed to found three scholarships, each of £45 a year for three years—'Toward the support of these three scholarships they have agreed together to subscribe 90 guineas annually, till by public donations a fund is accumulated sufficient for the permanent maintenance and increase of the scholarships.' Thus, within two years, three great improvements had been made in the School: new lecturers had been appointed, the collegiate system had been established, and scholarships had been founded.

On May 1st, 1845, the Warden presented his second annual report to the Collegiate Committee. The success of the College had been maintained: twenty-nine students had been in residence during the winter-session—among them, Kirkes, Burd, Worship, Crosse, and Sympson Among the students who entered the School in 1845 were Drage, Briscoe, and Horace Dobell: and two who afterward made their mark in other ways of life, Mitchell

Henry[1] and Albany J. Christie. The Warden reports that 'the Collegiate system, though, like any other, it cannot make all pupils industrious, is yet of great value in preventing the idle from becoming dissolute.' And he advises the Committee to provide outer doors for each set of rooms, that the men may be able to sport their oaks after the fashion of Cambridge and Oxford. In October, 1845, there were thirty residents; and ten applicants had been refused, for want of room.

1846.

In September of this year he published his 'Records of Harvey'[2]—a collection of all the entries relating to Harvey in the journals of the Hospital. These Records, with their minute historical notes, show how his work for the 'Biographical Dictionary' had taught him the art of amassing and arranging a whole host of small personal facts; they show, also, his love of the Hospital, the natural reverence that he had for the place and its history. He was fond of saying that it was 'the oldest, the largest, the richest, and the best' of all the Hospitals of London; he named his eldest son after its Founder; he always observed St. Bartholomew's Day; and, in his later life, the restoration of the Founder's church, and the rise of the new School-buildings, and the increased beauty and dignity of the Hospital, were a constant delight to him.

Beside this account of Harvey, he finished and published in 1846 his first catalogue—the Pathological Catalogue of the Hospital-Museum.[3] In the fifteen years that had passed since Mr. Stanley's catalogue had been printed, more than a thousand pathological specimens

[1] It was Mr. Mitchell Henry, M.P., who persuaded the Abernethian Society to buy their grand Presidential chair, with the angels on the top of it: which had originally been designed for a church.

[2] 'Records of Harvey, in extracts from the Journals of the Royal Hospital of St. Bartholomew.' Published by permission of the President and Treasurer, with Notes, by James Paget, Warden of the Collegiate Establishment, and Lecturer on Physiology, in the Hospital. London, John Churchill, 1846. Pp. 37. Forty years later, in 1886, these Records were reprinted, by the care of Sir William Church and Dr. Norman Moore, in the St. Bartholomew's Hospital Reports, vol. xxii., and were also republished in separate form.

[3] 'A Descriptive Catalogue of the Anatomical Museum of St. Bartholomew's Hospital.' Published by order of the Governors. Vol. i. Containing the descriptions of the specimens illustrative of Pathological Anatomy. London, Churchill, 1846. Pp. 487.

had been added to the Museum: the new catalogue was 487 pages long, and contained descriptions of 2,298 specimens of disease or injury, and an immense number of clinical notes, reference-tables, and special references for the study of general pathology.

On October 1st, at the opening of the winter-session, he gave the Introductory Address to the students, 'On the Motives to Industry in the Study of Medicine.' The custom of the Introductory Address was in 1846 almost a new thing at St. Bartholomew's Hospital. It was maintained for many years; it was abandoned for no compelling reason; and it was brought back by the students themselves, under the auspices of the Abernethian Society. The first meeting of their Society, each winter-session, is made the occasion for one of the staff, chosen by themselves, to address them. By this happy device, the Introductory Address has been relieved of its old formality, its air of distance: the orator of the evening is the guest of the Society, and sits at the right hand of its young President. In the whole year's work of the Hospital, there is no better sight than one of these crowded meetings. And, in this 1846 address on the 'Motives to Industry,' the need of union and sympathy between seniors and students was put in very plain words:—

> We ought all to be united, not only, as we must be, by one law of interest and of responsibility, but by all we have, or should have, in common; by the one pursuit of science, by one zeal for the honour of the school, one desire to maintain unsullied the reputation which we all derive from the great and honourable men who have worked here before us,—by one feeling, that a sordid or unhandsome act of one would be a blot on the fair fame of the whole body.

He speaks also in very plain words of the responsibilities of practice:—

> Your responsibilities are as various as are the ills that flesh is heir to; they are as deep as the earnestness with which men long to be delivered from suffering, or from the grasp of death. Why, we sometimes see the beam of life and death so nearly balanced, that it turns this way or that, according to the more or less of skill that may be cast into the scale of life. And surely, if we could gather into thought all the issues that

are involved in the life or death of any man, the anxiety of ignorance at such a time would be intolerable. For, at all such times, the issues and the responsibilities are manifold; it is not alone the fate of the sufferer (though in that, indeed, may be the most fearful consequence of all) but, as each of us must have felt in some instance very near to his own heart, those that stand around have all their various griefs and fears, their hopes, yet sad forebodings. And now, all is permitted to depend upon the skill of one. Conceive that one yourself: what would be your remorse if, when in their confusion and distress they look to you, you feel helpless as themselves, utterly unworthy of the confidence with which they still lean on you; your hand paralysed by the fear of ignorance, your mind confused in that half-knowledge, whose glimmerings only show that more skill might save the dying man! Yet this must be the remorse of every one who will neglect the study of his profession, and yet dare to undertake its responsibilities. . . .

Do not imagine that your responsibilities will be limited to the events of life or death. As you visit the wards of this Hospital, mark some of the hardly less portentous questions which, before a few years are past, you may be permitted to determine. In one, you will find it a doubt whether the remainder of the patient's life is to be spent in misery, or in ease and comfort; in another, whether he, and those who depend upon his labours, are to live in hopeless destitution, or in comparative abundance. One, who used to help his fellow-men, finds ground to fear that he may be a heavy burthen on their charity. Another counts the days of sickness, not more by pain and weariness, than by the sufferings and confusion of those who are left at home without a guide, and, it may be, starving. Oh! gentlemen, I can imagine no boldness greater than his would be, who would neglect the study of his profession, and yet venture on the charge of interests like these.

In his report for 1846 to the Collegiate Committee, he says:—

Since the foundation of the Collegiate Establishment, the number of students annually entering to the Hospital has been greatly increased. No sufficient cause, I believe, can be assigned for this, except the evidence which this foundation affords that the affairs of the School are conducted with energy and liberality, and that due attention is paid as well to the moral conduct as to the studies of all the pupils, whether resident in the Collegiate Establishment or not.

Among those who entered in October were Robert Thompson, Meade, Hare, Rainey, Robert Craven, Oliver Pemberton, and Henry Power. By November there were thirty-five students in residence, and fourteen waiting admission: and £100 was given, by Mr. Robert Sprague, toward a special fund for enlarging the College.

It was in this year (1846) that the House of Charity was founded. This good work was begun in a hired house, 9 Rose Street, Soho: later, the Council obtained the present house, at the corner of Soho Square and Greek Street. Among the founders were, first and foremost, Henry Monro and Lord Selborne: with them Mr. Gladstone, Lord Cranbrook, Sir Thomas Acland, Dr. John Ogle, Lord Blachford, Canon Wade, Dr. Chambers, Lord Iddesleigh, Lord Lyttelton, Mr. Paget, and others: and among the earliest members of the Council were Prof. Montagu Bernard, Lord Coleridge, Lord Hatherley, and Mr. Henry Walpole. In the first days of the charity, there was no Resident Warden; and Mr. Gladstone and Mr. Paget were among those who took it in turn to sleep at the house.

1847.

In January of this year came his appointment to the Professorship of Anatomy and Surgery at the Royal College of Surgeons, to give the Arris and Gale Lectures. Some account of these Lectures on Surgical Pathology is put toward the end of this commentary. He held the Professorship, by annual election, for six years; and each year, during a fortnight, gave six lectures.

In February, he was elected Assistant-Surgeon to the Hospital. He was at this time thirty-three years old, and had been eleven years qualified to practise. It is an instance of the difference between surgery then and now, that in all these years he had not done a single operation in private practice: he writes to his brother on July 27th, 1847, 'I did my first operation in private practice to-day . . . . a trivial affair, but it may do for a beginning.'

An old student, Dr. Horace Dobell, tells a story of this election at the Hospital:—

I was witness to a battle-royal between Mr. Paget and Mr. McWhinnie. McWhinnie was his senior both in age and standing at the Hospital, and had waited wearily for a vacancy

in the Assistant-Surgeonship. Paget was waiting too, and had done such work as to have richly earned promotion, and he had set his life-prospects on getting this post. McWhinnie thought he ought not to be opposed by a junior, and learning that Paget meant to 'put up,' he tackled him one day in the Museum, where I happened to be working. First he tried persuasion, then threats of defeat. Paget kept calm but obstinately asserting that he intended to stand. McWhinnie grew hotter and hotter, and they retired into the Curator's little room to fight it out. The storm grew on both sides—but the younger man never budged an inch from his first position, that he meant to put up, and meant to fight hard, and meant to win.

In June, he received the offer of another Professorship in London, and declined it: he writes to his brother—

The more I think of it, the more I am disposed to decline it. After what has been said to me, it is hardly vanity to feel that the Council of the College are glad they have elected me to the Arris and Gale Professorship: and it is most desirable that they should continue to be so, for I hold nothing more important to me than that Professorship: and many things which I need not now mention make it highly important to the School that I should retain it even for several years. Now, if the Council wish to have me still, it is most likely they wish to have me to themselves, and altogether, except for my engagements at the Hospital: they are not likely to think the better of me for lecturing anywhere else. Possibly, also, something of this kind would be true of the feelings of the Treasurer and others here: indeed, I know some have expressed fears that as I 'get on' I shall not continue to devote myself to the School with much energy. Then, again, I have already excited not a little jealousy: and it may not be wise to stir up more, or to get even the name of a Shark in the taking of offices. . . . As regards practice, I am nearly sure it would do me as much harm as good: for already I am thought too much of a professor to be a practitioner—and this with much justice.

The School-entry this year was sixty-one, against forty-four in 1843. Among the new students were Roper, Sharpin, Dingley, and Alfred Tylor.

Letters to George Paget. 1847.

1. *March* 1*st*.—I return your congratulations (on the Assistant-Surgeoncy) with hearty thanks. Mine has indeed been a surprizing victory: for though one might of late have nearly reckoned on it, yet when I remember how barely possible it seemed, ten years ago, that I should succeed to the next vacancy, I can even now hardly think it achieved. Thank God for it all: I seem now to have a fair view of the circle of my duties for the rest of my life—for the longer I live here the less I feel disposed to leave this for the turmoil and contest of private practice. The election had no incidents worth writing of: hardly any worth even telling to pass the time. *March* 10*th*.—I am fairly in harness, and see from 180 to 220 patients on each of my days—sharp practice for a beginner. My salary is £100 a year: but I have determined to give up £50 a year of what I receive as Warden: for this is collected by contribution from the Medical Officers and Lecturers, and it would greatly hinder my plans in the Hospital to be to this extent under obligation. So I shall profit to only £50, and my Professorship, £26 a year. But thank God for this. *April*.—I have done my first operation in public: rather a difficult case, but I achieved it without disgrace. I hope your next account of your health will be better—God save you from being again laid up. My time is exceedingly occupied with the Lectures and other things: and with all my work I am in a great anxiety about them, especially as I think the circumstances of my appointment will bring me rather hard judges.

2. *May* 6*th*.—I have given two of my College Lectures. They were well received, the theatre was crowded, and those whom I can trust to tell the truth have praised them: so I hope to be re-elected Professor. My father was at the first, and enjoyed the circumstances immensely. *May* 19*th*.—My lectures are over, and thank God well over—their reception was most gratifying, and I have been assured from all quarters that they were well thought of. They will be printed shortly in the 'Medical Gazette.'

3. *Sept.* 15*th*.—We are most thoroughly obliged to you for your bountiful supply of ferns: they all arrived safely, and now make my library (to my taste at least) the prettiest room in London, and the most agreeable to sit in. You who occasionally see green fields cannot imagine the refreshment of my fern-house, with the damp windows just letting one see

bits of the bending and nodding fronds glistening through the vapour: I grudge the time that I am out of doors. I have had another operation in private—a good one, the patient being a Churchwarden, and most other things, in Clerkenwell. *Nov. 15th.*—It is proposed to give some testimonial to Dr. Forbes, on his retirement from the Review, in consideration of the honesty and spirit with which he spent himself and his money in the improvement of medical reviewing. You should read his farewell address, in the last number: it shows more public spirit than ever I thought to find in a real Scotchman. I shall contribute and do all I can: for he gave me work and money when I wanted the latter very much, and has always appeared to me a thoroughly honest, unselfish, and enterprizing man—the best specimen of an Editor, in all matters of good feeling and liberality, that I ever knew. *Dec. 22nd.*—We are in a terrible disturbance of our School, through the mischief that the 'Lancet' has made with some of Burrows's evidence before the House of Commons.[1] It's my first experience of a row: Heaven help us out of it: but it's a nervous thing. Happily, as yet, I have only been in it as a sort of 'Head Pacificator,' a restorer of order and the like. But my turn may come next. I was not in the best mood for such a thing.

1848.

In the Warden's house, the chief event of this year was the birth of his eldest son, on March 9th—on which day, eighteen years before, the deed of apprenticeship had been signed with Mr. Costerton. He writes to his brother, 'It's an auspicious day, the 18th anniversary of my entrance into our profession.'

His report for 1848 to the Collegiate Committee says that one improvement has still to be made in the College —that parents and guardians should cease to use it as a reformatory—'In looking through the list of students, I cannot but conclude that the College should not be regarded as a place for reforming those who are disposed to be idle. It is excellently suited for industrious students, and for those who are disposed to follow good

[1] The reference is to Mr. Wakley's Medical Registration Bill, which was referred to a Select Committee of the House of Commons. Sir George Burrows gave his evidence in June of this year: he was at the time Senior Censor of the College of Physicians. (See Dr. Sprigge's admirable Life of Thomas Wakley. Longmans, 1899.)

examples; but I can only see reason for regret that, under the pressure of solicitations from friends and parents, any others have ever been admitted.'

Among the students who entered in October were Langworthy, Hewer, Haviland, Tait, and the present Treasurer of the Hospital, Sir Trevor Lawrence.

At Yarmouth, the breaking-up of the home had begun in August, 1847, when some of the more valuable pictures had been sent up to be sold in London. During 1848, much else drifted away for sale; and, in October, everything went at auction. Kate Paget's letters tell of the miserable failure of the three days' sale—how the pictures and books went for next to nothing, and some of the treasured collections for less than the cost of the cabinets that held them—'The sale has failed utterly, has been utterly *ruinous*—You cannot tell what it was, from 10 to half-past 4, listening with strained ears to the constant shuffling of feet, and constant hum of voices, and the auctioneer's hammer. . . . I hear nothing but kind words from the *poor*, they are kindness and affection itself to us, and I believe have shed more tears, at the things going, than ourselves.'

Yet they agreed, though the house was thus dismantled, to keep one more Christmas-Day in it, for their father's sake:—

> In regard to Christmas, James is very desirous that we should spend it at Yarmouth—that we should do this year what we thought of doing last year, make a pic-nic in the old home. I am very willing to join in this, which I daresay would be a very jolly proceeding, though somewhat eccentric under the circumstances.—(*George Paget to Alfred Paget, Dec. 6th.*)

The three brothers, from Cambridge, London, and Shrewsbury, were each of them to bring something in kind—wine, or Christmas fare: Kate Paget writes to one of them—'You are all to come here at Christmas, pray God it may be a happy meeting, and now that it is decided on I will not do anything to prevent it, but give my aid in making up for empty rooms and the loss of pretty things. I am to be housekeeper, for Patty swears she'll have nothing to do with it.' Then, on December 16th, Frank Paget was suddenly taken ill, and died

before Christmas came. It was the end of the troubles of the house on the Quay: and, on Feb. 14th, 1849, old Mr. Paget and his daughters left it. Alfred Paget writes of them in his memoirs:—

They are leaving the house where, since it was built, my Mother, Arthur, and Charles, and Frank—besides all those sisters and brothers whom I never knew—have died. The people, as they pass, look up with horror at the closed shutters, as if they cannot be shut for another death. It is left—and they will be closed for ever. That house will never be halved: it will be pulled down like the Brewery. The bricks of the old Brewery have formed the foundation of the Roman Catholic Chapel on the beach—what will *these* bricks be consecrated to form? May God's praise alone be heard above them. Oh! what life and activity in every room of that house—how many a labour gone to the winds—and in every bedroom of it one or more deaths. It must not be that they perish out of home who build it upon earth. Every one returned to die there—*Requiescant in pace.*

In 1859, the house was made the Government Schools of Art and Navigation. It is now a School of Science and Art, under the management of the Corporation. Thus it has come back to its old uses, but at a higher level: the art-students draw from Michael Angelo and Donatello, not from Fuseli: and, on the side of science, the collections of shells and corals, and of insects, and of dried plants, have given place to a chemical laboratory, built out from the dining-room.

Letters to George Paget. 1848.

1. *March 30th.*—I think you might perhaps get me some newts' spawn now from the place you told me of. I have some frogs', which has developed abundant and lively tadpoles, but their skins are too black for some examinations that I want to make. It's great amusement, and little trouble, to keep and watch them—*e.g.* in a finger-glass with some moss, and they are beautiful objects for ciliary movements, cells, &c. *May 3rd.*—If you do me the honour to attend a lecture, you should choose Thursday the 11th—at least I think that will be the most interesting one. But I have been terribly disappointed about embryoes: the difficulty of obtaining materials for study in London is really extreme. This, and the price of Alcohol,

are quite enough to keep English Physiology behind the German. I have been repeating and extending Hunter's experiments on the freezing of eggs,[1] and find that the albumen of good eggs has a peculiar mode of freezing which enables it to fall as low as 16° at least before it freezes—then, it freezes, or rather its water does, and rises to 32°. Thus eggs are protected from freezing even when exposed to intense cold: but it is not life—you may spoil the property without killing the egg. All this will be for Lecture No. 1 on Tuesday.

2. *June 3rd.*—Among the few annoyances that the necessity of constant work causes me, the greatest is the inability to make or retain the acquaintance of men in whose society I might enjoy and improve myself. But I cannot help myself: though I may appear to be working for reputation, I am really working for every day's bread. Dependent as I am, or seem to be, upon the School and College, I dare not neglect them; and their business occupies me all day—so here I must stick. I have plenty of newts, but they will not breed; and if they *did* spawn in London, the dirtiness and necessity of frequent change of the water would I fear quite spoil the hatching. So I shall be very glad if you can send Mr. Sims, of the Anatomical Museum, to collect me either some eggs, or else the tadpoles, of the newts about Cambridge—the tadpoles would be best, and the younger the better. These tadpoles seem to me to breathe with their lungs much earlier than is supposed. *June 9th.*—I am very greatly obliged to you for the parcel this evening, although, most lamentably, every tadpole was dead. I was never so disappointed in any pursuit. It is really quite vexatious: for newts are growing so rare about London that I fear I can get none. . . . I am very sorry to hear of your fatigue—but let me prescribe. We expect Kate on the 18th and Alfred on the 19th: do come and meet them—there is a Review on the 19th: it, and an Opera, a day at Richmond or some such place, or at Blackwall and the Chinese Junk—a very little time thus spent would cure you. Let Gonville wait a few days more: he will not count them, when so many centuries have passed since he was last visited.

1849.

On March 12th, 1849, the Shipping Clubs of Yarmouth voted a pension to old Mr. Paget, who had served them,

[1] See his paper 'On the Freezing of the Albumen of Eggs' in the Transactions of the Royal Society for 1850.

as Treasurer and President, for nearly half a century. His son writes, congratulating him:—

One may indeed heartily thank God that he is so good to us, and yet not the less because this has come as an example of his uniform dealing with the upright—"I have been young," said David, "and now am old, yet never saw I the righteous forsaken, nor his seed begging their bread." The more one thinks of it, the more is the thought grateful that you should be as truly in the highest position as a merchant at Yarmouth as you would have been if, all your life, you had been gathering wealth instead of good renown—more honoured, and more justly, while poor, than you would have been if rich. Really, my dear Father, you put us to the blush—for what am I to gain in this the early day of my life to match the honours you are gaining in this later time?

But I should not end my congratulations by midnight. Be assured they are as hearty as can be, and that I quite grudge to be not with you now. But (D.V.) I will come down in the summer, and see Yarmouth once more in a happy time and with a light heart. . . . With the most sincere prayers that God may grant us all many years to see you enjoying your renewed prosperity and unsullied honour.—J. P.

But this gift from the Shipping Clubs could not pay the accumulated business-debts: and in April the three sons, George, James, and Alfred, bound themselves to provide, somehow, money enough to pay them by degrees, and to keep their father and sisters in comfort. They left nothing to sentiment, but drew up and signed a formal agreement—'Business never hinders love: mere understandings often do': and they determined to find, every year, a certain quantity of money—'a terrible sum to look at, but not to be evaded: it has great value for the suppression of many projects I might otherwise be tempted to indulge in.'

In May 1849, the Pathological Catalogue of the College of Surgeons Museum was finished, after seven years' work. It extends over 1,218 pages, and contains descriptions of 3,520 specimens: but it must be measured not by its length, but by the minuteness of its descriptions, and the close following of Hunter's manuscripts. The order of publication of the five volumes of the Catalogue was as follows:—

1846. Vol i. 144 pages. General Pathology.

1847. Vol. ii. 255 pages. Pathology of the Blood, and of the Organs of Locomotion.

1848. Vol. iii. 287 pages. Pathology of the Organs of Digestion, Absorption, and Circulation.

1849. Vol. iv. 350 pages. Pathology of the Respiratory Organs, the Nervous System, the Organs of the Senses, &c.

1849. Vol. v. 182 pages. Pathological Specimens preserved in the dry state in Cabinets.

Mr. Clift, on whose earlier Catalogue (1830) the new Catalogue was founded, did most of the work of identifying Hunter's specimens, so far as it was possible, with the cases described in Hunter's manuscripts or elsewhere; and here he had no guidance but his own memory of all that Hunter had said and done.[1] In 1830, the number of the pathological specimens was 1,709. Between 1830 and 1846, about 600 were added by donation, and 1,208 by purchase from the private museums of Sir Astley Cooper, Liston, Langstaffe, Howship, and other surgeons. The Preface to the new Catalogue says:—

The additions being thus more numerous than the original collection, the Council considered that it was not desirable to separate any longer the Hunterian specimens, or to maintain unchanged the arrangement of which Mr. Hunter left so incomplete a sketch, and in accordance with which it would have been impossible to classify the additions to the Museum. They therefore determined that a new catalogue should be printed, which should include the descriptions of all the specimens in this portion of the College Museum—as well the Hunterian as those which have been added since the Hunterian Collection was placed in the charge of the College. . . .

In arranging the collection and preparing the Catalogue, every specimen was repeatedly examined by Mr. Stanley and Mr. Paget. The descriptions of what the preparations still

[1] The story of Mr. Clift's devotion to Hunter's life and memory cannot be told here. Gossip said that he was Hunter's son: it was not true, but when it came to his ears he said 'I only know this, that, if I was, there isn't a Duke in the street that I'd take off my hat to.' It is a pleasant story, also, of him and the Tax-collector. He had lived the best part of his life in the Conservator's house next the Museum, rent-free: and when he retired to Hampstead, the tax-collector called. Mr. Clift greeted him with effusion: 'Are you *really* a tax-collector? Do you know, I've never seen a tax-collector; I've wanted all my life to see one. Come in and sit down and have a glass of wine.'

display to the naked eye were written by Mr. Paget, and, after revision and comparison with the specimens, were sanctioned by Mr. Stanley. These gentlemen are, therefore, jointly responsible for the correctness of the descriptions. In the case of the Hunterian specimens, Mr. Paget has inserted, in every possible instance, the histories or other detailed notices concerning them; employing and verifying for this purpose the numerous references which had been already made by Mr. Clift to the manuscripts and published writings of Mr. Hunter. He has also given all the details respecting the other preparations that could be collected from oral and manuscript communications, from contemporary publications, and from other sources.

The School this year showed a great increase in the number of its students. In his report to the Collegiate Committee, the Warden says, 'It is very satisfactory to observe that the number of pupils entered to the School is this year just twice as great as it was when the Collegiate Establishment was first founded. The School has thus advanced to the highest place among those of England; and there can be no doubt that the College has been greatly instrumental in effecting this improvement.' Among the new students in October were Robert Martin, George William Calender, and Henry Monro.

Letters to George Paget. 1849.

1. *Jan.* 11*th.*—I thank you very much for your kind good wishes on this, the most momentous of my birthdays, when I end the half of the 'years of man.' I cannot have a happier future in the things of this life: but God grant me a better for those of the next. *Jan.* 23*rd.*—I did a formidable operation on Saturday . . . . Thank God I got well through it, and the patient is making good progress: but it was one of the hardest cases of tumour I have seen meddled with. *Jan.* 30*th.*—There is I think no chance of finding any one here who would take such a situation as that at Rochester. Happily, our pupils are a better sort of men—at least nearly all of them are. I quite rejoice to hear of difficulties in obtaining Assistants on such terms, and that the difficulties are increasing. *March* 27*th.*—I performed my first lithotomy on Saturday—slowly and not, perhaps, too dexterously—but not confusedly—and, as I hope, very safely, for the boy is doing well.

2. *May* 15*th.*—I should thoroughly enjoy a holiday with you, and I would take one if it were not so expensive—not of money, but in subsequent work. The time I have to give to my College Lectures is taken so completely from what should be given to other duties that, while they go on, all other things fall into arrear. I reckon that for every holiday I must do more than a day's work, and that therefore the least work will need to be done if I take no whole holidays till near the close of the summer. Then (D.V.) I hope we may get to Yarmouth; but till then I am resolved to work on gently and take occasional half-holidays and good nights' rests. Not that I feel the need of these luxuries—but I begin to think I cannot be so unlike other people as to be able to endure much longer what others soon fail under.

This is an auspicious evening: for I have just despatched the last fragment of the College Catalogue. The whole is now completed after more than seven years' work. I cannot but be very grateful for the health and resolution to have finished so large a task—although I believe I have given to it scarcely more than the time that some might have thought it only fair to spend on recreation.

3. *May* 23*rd.*—I am very glad to hear of Burd's success; for he had worked so well through the winter that a disappointment might have done him harm. He says we shall have his opponent Martin for a pupil here next October; I hope this is so, for we have not now many University men. *May* 31*st.*—I have a reasonable hope that the College will give me £50 more than was promised for the Catalogue. But I have no security of this, and it is only within the last few days that I had any good hope for it. If they do, I may live on till October: and that's all, at the best. . . . . I saw Mr. Martin to-day, and I both think and hope he will come here. He appears to hesitate only between us and St. George's, and I was glad that he found us at some active work.

4. *Aug.* 27*th.*—My hopes of a MS. by our pious founder are all overthrown by your letter. Had Rahere written anything, his successors would certainly have preserved it: for they had a prosperous priory long after his death; and his writings would have been known, at least by name, to Cave. I should not thus, at once, give up the chance of an Hunterian MS.: for the letter prefixed to the Life[1] was not written by Hunter

[1] A lithographed letter, signed 'John Hunter,' recommending Dr. Baillie for the office of a Physician to St. George's Hospital, is prefixed to Ottley's 'Life of Hunter,' in the first volume of Palmer's edition of Hunter's Works.

but by Baillie. Clift, as soon as he saw it, recognized the mistake, and I think remembered the event of Baillie asking Hunter for such a letter, and Hunter telling him to write it himself. Hunter's handwriting was of the same kind, but smaller, indeed generally much smaller. It was a clear and distinct hand. . . . The College have given me the extra £50, so I hope I shall survive through this year. Of course you have heard of poor Aston Key's death. For a day I regretted, almost, that I am not in the world of practice; but I am again quite content, and in doubt whether I shall ever reach that world. *Sept.* 1*st.*—All well here, thank God—though the Cholera appears quite unabated and beyond control. . . . I am much invited to let my likeness be published by Mr. Stone, of the College Library, in the set of lithographs in which he has published Budd, Todd, Forbes, Fergusson, and a few others. I have long refused, but he is importunate. I should be very glad of an opinion unbiassed by the personal feelings of which many incline me to say *no*, and as many *yes*. I wish you would give me one, though I am ashamed to ask you to think of such a thing.

5. *Oct.* 9*th.*—Last year was one of so much expense and so small income that I sometimes fear I shall be run aground. The School was bad, though, as it chanced, the best for the year in London—my father's wants heavier than in any year before—I could hardly stand such a year again. Thank God, the School is this year better: I think it will prove the largest entry we have ever had: and with the help of living, if we can, yet more quietly, I have hope of recovering ground: but I cannot tell.

I suspect you will find yourself obliged, like all who have very active practice in heavy cases here, to leave your work completely for a few weeks in each year. Brodie, Bright, Locock, and all the men of that stamp do this, at whatever cost: after a certain day, they will take not a single case, and they all say that they save their health, and lose not a guinea.

Holt and Martin are both here; the former, however, not in College. Dr. ——'s son is disposed to do well, but has a flighty, idle, gossiping turn of mind: I hope he will be kept out of mischief, but I do not expect more than this. The general character of our men is good, and I have been able to see in the entries more evidence than in any former year that the real work done in the School is bringing its proper reputation. We no longer depend on old connections for our pupils, I may well be thankful for this: for every year seems to make

it more likely that I shall rest here. I cannot see how it can ever be safe for me to risk leaving, at the cost of more expense and, at least for a time, less income elsewhere. However, I can very well be content to wait.

6. *Oct. 29th.*—I could not to-day obtain any cholera-fungi for you; but I will try to do so to-morrow again. I believe, however, the whole hypothesis will be shortly exploded: for it appears certain that many of the things seen are not fungi, but remnants of food taken; that they are to be found in cases of typhus and dysentery and some other diseases; and that they are not to be found in the air or water of many of the worst cholera-districts. All recent examinations, except at Bristol, are I am told opposed to the 'fungus-theory.' . . . You were once, I think, collecting evidence on the atmospheric conditions favouring the occurrence of tetanus. We had, lately, three cases in a fortnight, after having none for I think six months. If you wish, I can send you notes of them.

1850.

In June of this year, he began to feel the strain of the constant responsibility and hard work of the Wardenship: and on June 29th my mother writes to George Paget:—

As we have sat quietly alone, I have noticed with great pain the weariness (almost exhaustion), nervousness, and depression which he has evidently tried in vain to overcome. He feels and speaks to me of the weight and vexation of the College just now as more than he can bear. His own expression the other evening was, 'I feel almost as if I had thirty sons rather than pupils to watch over.' The difficulty is so great, of so shifting his duties as to allow of his leaving with an easy mind: for if he carries his College anxieties with him I fear his absence will be of little use.

In July, they took a cottage at Harrow Weald, where he could go for a day or two at a time. Here, at a school prize-giving, he met Mr. Keble: 'They had a prize-day yesterday, and a Concert in the evening, where (better than all the music) was Keble, whom I was rejoiced to see and speak with: though to say the truth his appearance is far from fulfilling the idea that the "Christian Year" and "Lyra" would make one form of him.'

Much of his time this year, both at Harrow Weald and in London, was spent in helping his brother Alfred Paget to write and publish a book on St. Paul's Epistles: he sent him more than thirty letters of advice and criticism, carefully studying many questions of divinity. In the winter of the year, Alfred Paget stayed for a fortnight in the Warden's house, to get help over this unhappy book: and his memoirs give a good account of the Warden's day's work:—

We got up to breakfast before 8 o'clock chapel, we never went to bed before 1 o'clock: it was quite impossible to get a moment by day, and I dare not ask at night, from my own sense of James' fatigue and labours. One Sunday, and then a second, we spent idly—we were to have really begun it that Sunday, but no, we were overtired. We will then do something each night of the week: what time shall we begin? Twelve o'clock, quoth James: and I hailed this hope as a new stimulus. However, one night was as much as I got, besides half an hour's reading aloud to the microscope on another evening. . . . I shall not forget what we used to hear so often from James, in the dusk of the morning—in the yellow fog, with the blinds down, and the candles on the breakfast-table—'It wants two minutes'—then we all go, to find Mr. Wix looking out the lessons, or having already begun service with the clerk and three students. . . .

During the winter-session of 1849–50, thirty-two students were in residence; and so many more had applied for rooms that it was proposed to limit the term of residence to two years. The thirty-two men in College, though they were only one-fifth of the whole School, had carried off half the Hospital prizes. And, of the thirty-two, eighteen were sons or near relatives of medical men—a sure sign that the Collegiate system was favoured by those who knew most about student-life in London. The long list of new students contains the names of Thomas Smith, William Turner, Jonathan Hutchinson, Daniel Hack Tuke, Longhurst, Bickersteth, Slade Baker, F. A. Humphry—and the first lady doctor in London, Elizabeth Blackwell, M.D.[1]

[1] My mother writes, *October 17th*, 1850.—'Well, we have our "Lady Doctor" here at last, and she has actually attended two of James' lectures, taking her seat with perfect composure. The young men have behaved

Letters to George Paget. 1850.

1. *March 15th.*—I write to ask if you can help me in a physiological matter. I want some bats, and cannot get them in London: but I should think in or about Cambridge some one might procure them. They may be active or torpid; but they should be small ones, for I want to examine the circulation in their wings in health and inflammation. Some of your country patients, I have thought, may know their resorts, and be able to collect them: if not, perhaps the man at the Anatomical Museum who procured the newts for me. If you are much occupied, Humphry would help, or perhaps Anthony. I am getting on with my Lectures, and find that even on inflammation things remain to be said. But I feel used-up; the long session and the long N.E. winds have shrivelled me. However, I am not ill, and really am not working hard: if I am thought ill, it must be because in a cold N.E. wind I went to Owen's first Lecture, and nearly coughed him down.

2. *March 21st.*—Since I was last in Cambridge, when you offered in words the same kind help as you offer now in writing, I have thought of the change towards practice as not impossible. But, so far as I can shape a plan, it has been to continue (D.V.) as I am, till I can publish, from my College Lectures, a work on Surgical Pathology. This I may possibly do two years hence, and I think it may bring me into a better surgical position than I now hold. I cannot help seeing that when the men now past 60 are gone, the great practices must fall to those who like myself are now below 40: and it seems absurd not to wish to take my place at last in practice. Still, I should not wish to change the quiet of such a life as I have now for any increase of income, if I thought I could always be likely to find enough here. But this is very insecure: and the petty troubles of the College disturb me much more than they did at first. I grow more anxious about it—almost nervous and unfit for the work. Altogether, I suspect that in three years' time I shall be wishing to move: and then, since I have no prospect of saving money here, and you, thank God, appear increasing every year in your professional success, I may ask you to fulfil your kind offer of help, to blow me westward.

extremely well, and she really appears likely to go on her way quite unmolested. She breakfasted here one morning with several of our students, and last evening we had a few medical friends to dinner, and she joined us in the evening. Her manners are quiet, and it is evident her motives for the pursuit of so strange a vocation are pure and good. So let us hope she will become useful in her generation.'

3. I must again ask your help for some bats, for those you sent me are so large, and their wings are so opaquely covered with pigment, that it is hardly possible to make sure observations with them. Yet they let me see enough to feel that with rather better objects for examination some excellent facts might be determined. It adds somewhat to the inconvenience of these that they are as fierce as rats. I am very anxious to have some small bats, either some young ones of this same species, or the adults of a smaller kind. I hope it will not trouble you much to set-up a search for me: I am sure of some good facts if I can get more transparent wings: and there are no good observations made on the circulation in these warm-blooded creatures. All you sent me are alive in my menagerie, kept by a rat-dealer and cobbler in Cloth Fair. He feeds them on milk and beef, and they have the advantage of a mingled atmosphere exhaled from rats, rabbits, puppies, mice, blacking, children, cobblers' wax, tobacco, and ill-drainage.

4. *Oct. 5th.*—Mr. Gibbon is not yet arrived, but I will consider him as introduced. Mr. —— is come, and I trust his uncle's account will prove true: but what I knew of him was, that he was taken from Oxford for marvellous extravagance as an undergraduate; but that he was judged to be now recovered from that disease, and convalescent, and able to try this climate. I cannot say he looks quite well yet: but I hope he will do, and I will give him all the help I can. Thank God, all goes well with the School; indeed, I think it will be even larger than it was last year, good as it was then.

1851.

This year, he was elected a Fellow of the Royal Society. He writes to one of his brothers, on April 4th, 1851, 'I am glad to tell you that my election to the Royal Society is nearly sure. Among 38 candidates, the Council have selected 15: and at the first election I was the only candidate for whom the whole Council voted. Nothing of the kind could be more gratifying. It comes of being peaceable.' On the occasion of this election, Sir Richard Owen said of him, to Prof. Miller, that he had his choice, either to be the first physiologist in Europe, or to have the first surgical practice in London, with a baronetcy.[1]

[1] It is to be noted that he afterward served five times on the Council of the Royal Society; a very unusual honour. His first term of service was 1854–1856: his last was 1888–89.

On July 2nd, he gave the lecture at the 'Evening Meeting' at the Royal College of Surgeons; and took for his subject 'The recent progress of Anatomy, and its influence on Surgery.' The word Anatomy, half a century ago, was applied not only to dissections, but also to the whole use of the microscope in the study of the tissues in health and in disease (general anatomy, morbid anatomy). He uses it in this wide sense of his own work, and of the work of John Hunter and of Bichat: and gives instances of the immeasurable value of the microscope in physiology and pathology:—

> It would be impossible to name a department of medicine or surgery, to which the recent studies of anatomy have not contributed, at least, useful facts. The pathology of inflammation, the repair of injuries, the production and development of morbid growths, the whole of that vast field upon which medicine and surgery meet and mutually illustrate one another—all these have been illustrated by direct observations with the modern methods of research. . . . Modern anatomy has adopted not only new methods, but even new objects of research; it has not only extended itself largely in its recognised territory, but, much more, has passed into wholly new fields of enquiry—with the microscope, with chemistry, and with enlarged comparisons of lower forms and types of structure.

He goes on to speak of recent observations with the microscope, bearing on questions of surgical practice: then of cell-life, and of life inherent in structure, not external to it: he leaves behind him Hunter's phraseology, and advances to the doctrines of Schwann and Schleiden:—

> We are bound to discard, both from physiology and from the study of disease, all such expressions as 'action of the blood-vessels,' and 'action of absorbents': we can no longer speak of arteries as builders or of absorbents as modellers. All these are but the apparatus by which the materials, so to speak, in their raw state, may be carried to and fro in parts that are themselves forming. Neither can we speak of the materials for organisation as being merely plastic and passive, as so much clay to be moulded by some external force. We can only speak of them as being self-organising, autoplastic,

working with a force which, whencesoever it is derived, is efficient in themselves.

Finally, to show the urgent need of microscope-work in pathology, he speaks of the uselessness of the old statistics of cancer:—

I would venture to say that whole volumes of statistics as yet recorded upon the matter, nay, that almost every statistical table yet printed, is simply and wholly valueless for these purposes. . . . The microscope must be used, with all other methods of research, before we can approach the knowledge of one of those truths for want of which we are constantly practising in doubt, still casting upon the patient the responsibility which we ought to take upon ourselves, still leaving things unsettled which have been unsettled for centuries past.

This last sentence is significant of the whole of his work for pathology and surgery—*The microscope must be used, before we can approach the knowledge of one of those truths for want of which we are still constantly practising in doubt.*

In August, he writes to his wife, telling her first of a case at the Hospital, and then of the humorous side of London during the Great Exhibition:—

The case about which I was so much interested has done well, thank God, and the poor fellow is now I hope out of danger. It has been the best case of the year: such an one as nothing but surgery and hard work could, with God's leave, have cured. D.V., it will do me good. London is in a stranger appearance now than ever. Really, as one walks, there appear even more visitors than inhabitants: and these, nearly all, visitors of the middling and lower classes: all 'gentility' seems more thoroughly gone than in any former year, but there are crowds of undistinguished visitors, people that even stop in groups to look at Temple Bar, and the Neptune in Somerset House, and everything that some guide-book promises they may see without paying. I can quite laugh at myself for my disinclination for things without you. Owen asked me if I would go to the 'Messiah' at Exeter Hall on Friday—but I felt as if I would as soon be put in the stocks. But I will go if you will, and would then not mind Owen being with us. Thus it all seems—I feel paralytic without you, one half of me

senseless and useless: I cannot even do any work, except what the Hospital and the printers put upon me.

In October, 1851, he resigned the Wardenship, and moved house to 24 Henrietta Street, Cavendish Square. The number of new students had been 44 in 1843, and 61 in 1847: it was 90 in 1851. In his last report to the Collegiate Committee, he speaks of the appointment of Mr. Savory to be Medical Tutor, with rooms in College; and puts in a dozen words the epilogue of his eight years' work—'The students have lived as their fathers would wish them to live.' Among the first year's men were Rolleston, Newman, Furnivall, Jalland, Stretton, and Jowers.

Letters to George Paget. 1851.

Aug. 28*th.*—I have often cursed all dinner-parties, but never more entirely than now, when one has lost me the sight of you in your passing through London. I have been from home only two evenings in the last five weeks; and ill-luck brought the inexpressible nuisance of a dinner on this very one. However, I can only be in a rage; I cannot mend it now. *Oct.* 10*th.*—It is a pity one cannot feel well off even with such a school as this year's. My fresh entries will be more than 80, perhaps 85, yet I am very poor, and am as clear as ever about the necessity of getting-out for practice. Watson's house still tempts us: Lydia says it is all that I could wish for practice and comfort. I am to dine with Burrows to-morrow and talk over the matter with him. I am certainly very much disposed to try my net there—What think you? *Oct.* 13*th.*—I dined with Burrows, and talked fully over the subject of my move. The result was to decide, without further appeal, to move as soon as may be—and to move into the neighbourhood of Cavendish Square. I have to-day seen two houses; either would, I think, do so well that I propose to ask young Hardwicke to look over them. I need not again tell you how much I thank you for your offered help, or how much I shall try to make as little as possible of it necessary. You may depend on it that, although I may now move on decidedly, I shall do it very prudently. *Oct.* 23*rd.*—All, I am clear, has been done on the best advice that I could have; and now, only, may God prosper the plan. *Oct.* 30*th.*—I have resigned the Wardenship: and my resignation has been accepted with all the expressions of kindness that I could desire, and with much more regret than I feel I deserve.

LECTURES.

His lectures at the Hospital, on General Anatomy (microscopic anatomy) and Physiology, involved not only reading and writing and a vast amount of microscope-work, but also the endless business of revision and re-writing, the preparation of specimens and drawings, the need of 'packing his head' every night with the next morning's lecture, and the strain of holding the attention of a large class through a six months' course of more than a hundred lectures. The manuscript of them is written with the utmost minuteness, part word for word, part in elaborate notes; and each lecture is marked with the dates of delivery, revision, or re-writing. Kirkes' Physiology, that was the outcome of them, is now in its fifteenth edition, and has the gift of perpetual youth.

He gave his first lecture in October 1843. Claude Bernard's first account of the glycogenic action of the liver was published in December of that year; his work on the pancreas, and on the vaso-motor nerves, was later. Nothing was known of the purpose of the thyroid gland: nothing was known of cerebral localization: and, in comparison with present knowledge, the chemistry of the body, and the interchange of the products of its tissues, were left almost unstudied. In October 1843, Darwin had just written in pencil a very brief abstract, 35 pages long, of his first account of the origin of species; and Pasteur was in for his examination at the École Normale. The 'cell-theory' was almost a new discovery in Germany, and Schwann's book had not yet been translated into English.

Of the principles taught by him in these Lectures, there was one which he often quoted in later years—the doctrine of Treviranus, that each part of the body is in the relation of an excretory organ to all the rest: he recognized in it a sort of prophecy. Also, he lectured, with great care, on the doctrines of Gall and Spurzheim: he did not accept them, but he treated them with more respect than they now command; and, in 1854, he lectured on the 'symbolic' doctrine of Carus. In his later life, he always said that the work of Gall and

Spurzheim was something far above the nonsense of popular phrenology.

In a lecture on the functions of the brain, written somewhat after the manner of Locke, there is the following passage:—

Other portions of the human mind are the reason, and the conscience . . . by which there is established between man and the brutes a great difference, not in degree alone, but in kind. The spirit differs from all the faculties in its independence of our organization: for it is exercised best in complete abstraction from all that is sensible; it is wholly independent of the organization of the brain; wholly independent also of the education of the understanding.

The story is told, that a student put up a notice outside the lecture-room, 'Mr. Paget will lecture to-morrow on the Soul.' But in 1894, half a century later, an old student wrote to him, thanking him—

You cannot tell how much effect your life has had upon mine. When I came up to town in 1848, my mind was singularly uninstructed and untrained. Your influence, with that of F. D. Maurice, opened to me a world of living fact, thought, and discipline. You, your *self*, and your words—especially your lectures upon the functions of the cerebrum—deeply impressed me: your teaching of the essential potency of the will, and of its sure guidance by the pure reason, became a lasting influence in my life. You and he have lived ever since in my innermost nature.

Beside the long and heavy work of the lectures in Physiology, he gave a Morbid Anatomy lecture, with demonstration of specimens, every Saturday morning. It is mentioned by Mr. Oliver Pemberton, in an account of Sir William Savory's life[1]:—

It was at the commencement of the winter-session in October, 1846, that I first saw William Savory: the place, the dissecting-room of St. Bartholomew's; the time, soon after nine in the morning, when the early refreshment of Paget's lecture at eight had ended, and his audience dispersing broke the deep silence that had held them listening spell-bound to the words of the master of surgical pathology during the previous hour.

[1] 'In Memoriam: Sir William Savory.' By Howard Marsh and Oliver Pemberton. St. Bartholomew's Hospital Reports, xxxi., 1895.

His thirty-six lectures on Surgical Pathology at the College of Surgeons (1847–1852) were on the following subjects:—

1847—Nutrition.
1848—The Life of the Blood.
1849—The Processes of Repair and Reproduction after Injuries.
1850—Inflammation.
1851—Tumours.
1852—Malignant Tumours.

It is said that some of his seniors were vexed that a 'mere boy' should teach them; but he attracted so great an audience that the theatre had to be arranged as for the occasion of a Hunterian Oration. In 1847, he had spent five years over the College Catalogue, had examined and described a vast number of specimens, many of them the work of Hunter's own hands. Therefore he built his lectures on the foundations that Hunter had laid:—

The circumstances of my election to the Professorship indicated the Pathological Museum of the College as the appropriate subject of the Lectures. As circumstances had decided the subject, it seemed well to let them determine, also, the method, and to adopt that which was most natural to one engaged in the simultaneous practice of surgery and teaching of physiology. Thus guided, I designed to give lectures which might illustrate the general pathology of the principal surgical diseases, in conformity with the larger and more exact doctrines of physiology; and the plan seemed the more reasonable, because it was in accordance with the constant design of the great founder of the Museum.

The first edition of the lectures (1853) was in two volumes: one contained the lectures on nutrition, the blood, repair, inflammation, and general processes of disease; the other contained the lectures on tumours. The Preface to this first edition says:—

In all the affections considered in the first volume, we may trace purpose and design for the maintenance and recovery of

the body's health. The strengthening against resistance, the reaction after injury, the turbid activity of repair, the collection and removal of inflammatory products, the casting of sloughs, the discharge of morbid materials from the blood—all these are examples of the manifold good designs of disease; and they evince such strength and width of adaptation to the emergencies of life, that we might think the body was designed never to succumb, before the due time of its natural decay.

But in the diseases considered in the second volume we trace no fulfilment of design for the well-being of the body: they seem all purposeless or hurtful; and if our thoughts concerning purpose were bounded by this life, or were only lighted by the rays of an intellectual hope, we could not discover the signs of beneficence in violences against nature such as I have described.

These lectures are among the classics of science, both for the beauty of their style, and for the wealth of facts and of doctrines set forth in them—the vast amount of hard thinking that they record, their width and depth of argument. Especially, they are founded on the use of the microscope: that is to say, on the evidence of the senses. Hunter's teaching, for all its grandeur, was hindered by his strange use of figurative language, that betrayed him now and again into speaking of the tissues as though they were possessed of will or consciousness. For an extreme instance of this vagueness, so unlike his practical mind, there is his account of the gradual absorption, in repair, of diseased tissues:—

The remote cause of absorption of whole and living parts implies the existence of two conditions, the first of which is a consciousness, in the parts to be absorbed, of the unfitness or impossibility of remaining under such circumstances, whatever they may be, and therefore they become ready for removal, and submit to it with ease. The second is a consciousness, of the absorbents, of such a state of the parts. . . . The part that is to be absorbed is alive, it must feel its own inefficacy, and admit of absorption. The vessels must have the stimulus of imperfection of this part, as if they were sensible that this part were unfit. . . . .

There is a world of difference between this and Paget's teaching, which appeals, whenever it can, to the microscope: for instance, the last part of his description of the formation of granulation-tissue, by the outgrowth of minute loops and arches of capillary vessels from the primary capillary vessels round a wound:—

I beg of you to consider the wonder of such a process; how, in a day, a hundred or more of such loops of fine membranous tube, less than 1-1000th of an inch in diameter, can be upraised; not by any mere force of pressure, though with all the regularity of the simplest mechanism, but each by a living growth and development, as orderly and exact as that which we might observe in the part most essential to the continuance of life. Observe, that no force so simple as even that of mere extension or assimilation can determine such a result as this; for, to achieve the construction of such an arch, it must spring with due adjustment from two determined points, and then its flanks must be commensurately raised, and these, as with mutual attraction, must approach and meet exactly in the crown. Nothing could accomplish such a result but forces determining the concurrent development of the two outgrowing vessels.

It was this incessant use of the microscope, especially for the study and classification of tumours, that put him among the foremost pathologists of his age. He in this country, and Virchow in Germany, represent the long transition-period from Hunter to modern pathology; from the use of the vague phrase *materia vitæ diffusa* to the marvellous exactness of bacteriology; from the time when men could speak of a tumour as a 'strange distempered mass,' to the knowledge and the hope that inspire pathologists now.

These Lectures on Surgical Pathology went through four editions in this country, and two in America: they were, for a quarter of a century, the chief text-book of pathology. But it would be absurd to attempt to give an account of them here. Only, to illustrate his art in lecturing, and the way of his thoughts—what M. Pasteur called his *haute philosophie*—there is a passage in a lecture on degeneration:—

To degenerate and die is as normal as to be developed and live: the expansion of growth and the full strength of manhood

are not more natural than the decay and feebleness of a timely old age; not more natural, because not more in accordance with constant laws as observed in ordinary conditions. As the development of the whole being, and of every element of its tissues, is according to certain laws, so is the whole process regulated, by which all that has life will, as of its own workings, cease to live. The definition of life that Bichat gave is, in this view, as untrue as it is illogical. Life is so far from being 'the sum of the functions that resist death,' that it is a constant part of the history of life that its exercise leads naturally to decay, and through decay to death.

Of the manner in which this decay or degeneration of organisms ensues, we know but little. Till within the last few years the subject of degenerations was scarcely pursued: and even of late, the inquiries, which ought to range over the whole field of living nature, have been almost exclusively limited to the human body. Yet it could not be without interest to watch the changes of the body as life naturally ebbs; changes by which all is undone that the formative process in development achieved; by which all that was gathered from the inorganic world, impressed with life, and fashioned to organic form, is restored to the masses of dead matter; to trace how life gives back to death the elements on which it had subsisted: the progress of that decay through which, as by a common path, the brutes pass to their annihilation, and man to immortality. Without a knowledge of these things our science of life is very partial, very incomplete.

Or, for another instance, there is the first of the six lectures on repair—which he tells his brother was the hardest lecture that he ever gave—where he advances, after the method of Berkeley's 'Siris,' from the restoration of broken crystals, and the gemmation of fragments of Hydra, to man's regeneration; not following the 'dry unfruitful path of natural theology,' as he had called it in 1846, but finding evidence of design in the repair of injuries. The two sets of facts, those concerning degeneration and those concerning repair, were never far from his mind; and he worked them into his later holiday-studies of the healing of wounds in trees and plants, and the decay of autumn leaves; and into his final study of his own old age.

RETROSPECT (1814–1851).

It may be well here to look back over his early life. He left Mr. Bowles' school when he was 16, and went straight into apprenticeship. In 1834, he entered at St. Bartholomew's Hospital; and in 1836 became qualified to practise. In 1836, he was made Curator of the Hospital Museum: in 1839, Demonstrator of Morbid Anatomy; in 1843, Lecturer on Physiology at the Hospital, and Warden of the College. In 1844, he was married; in 1847 came the Professorship at the College of Surgeons, and the Assistant-Surgeoncy at the Hospital; in 1851, the Fellowship of the Royal Society. He had given fifteen years to science and to School-work, and had hardly got into practice; and he was almost as poor when he went to Henrietta Street as when he had first come to London. He kept himself poor, that he might pay his share of his father's debts; he began in 1843, and the last debt was not paid till 1862. But the want of money was not the worst of the troubles at Yarmouth. In 1843, his mother died; in 1844, Charles Paget; in 1845, the old Brewery was sold and pulled down; in 1848, came the auction in the house on the Quay, and Frank Paget's death. Thus, all through the time of the Wardenship, he had to watch the dissolution of his old home, the lingering illnesses, and the going-out of all the lights there. The men in College knew nothing of it; and must have wondered sometimes at the austerity of the Warden's life.

He fought his way at the Hospital, and set himself to be known there, and to be wanted there. He did not pretend to be indifferent to the goodwill of those who could help him: but he held his head high, and said what he thought, when he had a grievance against this or that member of the staff. Having to fight, he fought hard, and kept every inch of ground that he got: he never had any great respect for men who honourably win advantages, and then run away from them. He always preferred that a man should, in professional work, be like other men; going where they went, trying to get what they were trying to get, neither advertising himself nor hiding himself, but bringing good work into the open market, where more work might be had at a fair price if he would only

ask for it civilly. Not to fight like other men, and in harmony with them, and in constant rivalry against them, was failure in duty: no man ought to be above self-advancement by his work, and no man ought to follow any unusual way of doing the usual things. It may be that he was almost excessively averse from strangeness, novelty, or uncertainty, whether in the minds or in the affairs of men. It was like his avoidance of short cuts on a long walk: he preferred the high road; if a man would only keep to it, and go far enough, he would be sure to arrive. The roughest country-practice might be made a way of science: and every man, whoever he was, ought to try to do 'some good bit of original work.'

His love of hard work, and his dislike of eccentricity, are recorded in the entry-book of new students which he kept from 1843 to 1858. The book is interleaved; and he used to write short notes in it, how the men had fared at the Hospital, and afterward in practice. It contains many pleasant prophecies, that have long been fulfilled, and one or two very gloomy verdicts: for instance, he has written opposite the name of the one student who was at last hanged for murder—'Idle, dissolute, extravagant, vulgar, and stupid. He scarcely ever practised, and was chiefly engaged on the turf.' And it illustrates, again and again, his likes and dislikes. The following notes, out of some hundreds, are good instances:—

. . . Most laborious, honest, intelligent, but strange-tempered, fastidious, scrupulous, impracticable. He would do nothing in an ordinary way, served everyone well but himself, and was always losing ground. Still in the same condition, at the Cape, twenty years later.

. . Eccentric, not clever, always irresolute, and liking strange ways of doing things. He was occasionally an assistant, but never got into practice.

. . . A very idle, agreeable student, clear-headed and with much natural ability; exceedingly troublesome, but justly popular.

Idle, unscrupulous, with supreme impudence and vanity—a regular Jeremy Diddler.

. . . One of the most laborious, clear-headed, and capacious students I ever knew. He could learn anything without a fault. Besides, he was eminently modest, pious, and gentle.

So beautiful a mind surely never occupied so strange and grotesque a body: and this inferior part of him died after his second year of study.

These and the like notes in the old entry-book show his dislike of odd ways, his passionate love of work, and, it may be, a certain hardness at this time in his judgment of men. It is no wonder, if some of the students thought him formidable. But, all through the lean years at Serle Street and in the Warden's house, there was a vein of light-heartedness in him. Poverty was never made more dismal than it need be: only, he was very angry once when somebody gossiped about it. He had the best sort of good health: he could turn in a minute from work to play—and there were times for play, even at Serle Street—he could walk any distance, sit up to any hour, digest any food, sleep through any noise of traffic; he was easily moved to laughter; and he had the art of getting the utmost enjoyment out of the simplest pleasures. It is significant, that in his address on the 'Motives to Industry' (1846), he quotes Keble, George Herbert, and Wordsworth.

In his later life, he always spoke well of the time of the Wardenship. He had lived so many years in lodgings, and now he had his own home—as he said once, with a touch of anger in his voice, to one who complained of the dullness of things, 'You have a good wife, and good children: what more do you want?' He did not care to go into society; he was content with what he had of it at the Hospital: he writes in March, 1847, of the death of Mr. Hurlock, the Resident Apothecary: 'We have lost in him the brightness of our little Hospital society: and if loneliness were to Lydia and me unhappiness, we should be most unhappy: his virtues as a neighbour were more than I could tell.' They saw nothing of the fashionable side of London life, except the garden-parties at Sir William Lawrence's beautiful country-house at Ealing, and a dinner now and again in some remote part of the town, whence they would walk home to save a cab. Often he spent a week, or more, without going outside the Hospital-gates: for recreation, he would walk with my mother, of an evening, in the Hospital Square; and believed that the smell of the country on summer nights came even so far into London.

Men remember the light burning in his study long after the most deliberate revelry in College had reached its natural end; or he would let the chorussing last into the small hours, and then stop it, and go back to the business of 'packing his head' with the morning lecture.

Half a century later, on his Golden Wedding-day (May 1894), an old student wrote to him, 'I still remember the change in the Collegiate Establishment—the home-coming of the bride and bridegroom to their dwelling at St. Bartholomew's Hospital—and particularly how better and more refined strains of music reached my upper rooms than those that had previously distracted me from a student's room on the other side.' My mother's music, and her gentleness, helped to make the little house the centre of the circle of Hospital-life: it was moreover a house of call for all his people, and they brought all their troubles there. She had wished to visit and read to the patients; but had not been encouraged to this good work by the authorities. Every Sunday evening, she managed to provide a little feast, and asked any men who were in College that evening to come to music and supper. She suffered, and remembered it all her life, hearing the cries from the operating-theatre a few yards off, in the years before anæsthetics—remembered him coming back and saying that she looked worse than the patient—and she always used to wonder that a day had not been set apart for national thanksgiving for the discovery of anæsthesia. She had her share of the burden of Yarmouth; and they took it with them, when they moved westward.

But, on the whole, he bore his share lightly. His letters to his brother are, after all, business-letters: they give the hard facts, the dullness and the disappointment, but they say little about the pleasures that he loved when they came, and nothing about the strength of the spirit that kept him up and enabled him always to see ahead of his troubles.

VII

PRIVATE PRACTICE.

I COULD hardly be considered as in practice till October 1851, when, having resigned the Wardenship of the College, I left the Hospital. Before this time, I occasionally saw a private patient, and had a few cases, chiefly for operations, among those who lived near the Hospital and were not very poor; but, during the first seven years after obtaining my diploma, my largest income from practice was £23 13s.: and till I had been a surgeon for 16 years, it had never exceeded (?) £100.

Considering how little I had studied practical surgery during all but the later years of this time, and how much my mind had been given to my lectures, and to catalogues, and the care of the School and College, my practice had been nearly as much as I was fit for: but my education for much larger practice had by this time been unusually good. In the more than four years in which I had been Assistant Surgeon and lived in the Hospital, I had often been 'on duty' for others, and had done a very unusual quantity of the most practical work, both in the outpatients' room and in the wards. I doubt whether any Assistant-Surgeon ever did so much in the same time. I was thus not unfit to begin what was to be, after

all, the most important part of my life: at least not more unfit than any one who has not yet studied the differences between Hospital and private practice; and, certainly, one who has not studied in both is not much more than half-instructed in his profession.

I started in 24 Henrietta Street, Cavendish Square, a lucky house; for Sir Thomas Watson had prospered in it. Mr. Hardwicke got the lease for me on favourable terms; and we managed to furnish the house well enough to appear intent on business. My success, so far as it may be estimated by my income, was gradual but constant. Beginning at (?) £700, it gradually and, with one trivial exception, every year, increased till it exceeded £10,000: then I gave up operating, and it fell at once to about £7,000, and then slowly decreased. I thus enjoyed 'complete success,' as it may be called: for probably I had for some years the most lucrative surgical practice in London, and certainly I had the best, as reckoned by the number and gravity of the cases, and the proportion seen in consultation.

In looking back on this success, I feel quite unable and unfit to judge how far it was due to my fitness for practice. I was not disqualified by any of the gravest hindrances to success: as by being habitually idle, time-wasting, unbusinesslike, unpunctual, uncivil, unable to work with others; faults which I have seen singly or together spoiling the careers of men whose knowledge might have brought them great success. Neither, on the other hand, could I fairly assign any part of my income

to self-advertisement, or sheer impudence, extortion, unfairness, or mere greediness. I think it was all so far fairly earned that I might be regarded as an example of the rule which I have often tried to impress on pupils: that any one with a safe knowledge of his profession, and free from such faults as I have enumerated, may be as certain of success in the practice of medicine or surgery, or both, as in any other business in life: or even more certain, because his prosperity may be very nearly independent of that of others.

But, whatever uncertainty I may feel as to my qualities for a large practice, I can feel none as to the great degree in which it was due to the good opinion of my fellow-practitioners. This was shown, at first, in the regularly increasing number of cases to which I was called in consultation by my seniors; especially by old Hospital-pupils who were in large practice when I began. Some of these, as Edgar Barker and Herbert Evans, were old friends: but these were few; many more regarded me as a 'rising man' at the Hospital, and tried me; and, for a long time, I rather nervously felt as if being examined by them. I suppose I passed; for their number constantly increased, and each year added to them many with whom I had no Hospital connection, and many more of my own pupils as they advanced in life.

I thus enjoyed the happiest progress into large consulting practice; the happiest, because it brings the largest number of interesting cases; the least work, though the greatest responsibility, in proportion to the income; the most agreeable associa-

tions; the best position and the most friendly relations with one's brethren, provided one takes care to behave with scrupulous fairness to them and sometimes, even, with a kind of self-suppression. It seems to me, also, the way into practice which they should try for who have a reasonable ambition or reasonable grounds for thinking themselves able to gain a leading place. Especially it seems to be so for those whose work, as in Hospital appointments, must be done in the sight of competent observers who criticise it and talk about it every day. The expectation of the consequences of that criticism is a weighty addition to the inducements to do one's best in whatever may be undertaken: whether practice, writing, teaching, or any other work.

The contrast is great between the professional reputation which may be thus gained, and that kind of reputation which is due to the opinion of patients, or of whatever may be called the public. Indeed, except in so far as this public opinion may depend on what is learned from the profession, the contrast between these two kinds of reputation is nearly complete. The one is due to the opinions of those of whom the majority are fit to judge; the other, very often, to the mere talk of those of whom the majority are quite unable to form a reasonable opinion. Of course there are among those who have had no medical education some who judge reasonably concerning medical practice: but these are comparatively few: and of the rest the most positive, the most talkative and the most influential are generally the most ignorant.

I cannot tell how much of my practice was due to this kind of reputation. There were some, I know, to whom I did no kind of good, and a few to whom I did harm, who were very active in my praise; and it is only fair to say that, on the whole, the undeserved praise given to the members of my profession is far greater than the undeserved blame; so much so that it is not fair when men make themselves angry or unhappy at an unmerited blame imputed to them by their patients: they would, on the whole, suffer more if their patients always held their tongues. Doubtless, I had my full share of this advantage, though I cannot reckon its amount: and so I had of the sort of notoriety which comes of attendance on cases which, for any reason, attract much public attention. In the year in which the Princess of Wales was ill, my practice increased twice (or more) as much as it did in the previous years. This might be justified, in some measure, by the supposition that only one fit for practice would be in long attendance on Her Royal Highness; but, in other instances, and without the smallest good reason, I observed a distinct increase of practice after attendance on cases that were, for any reason, much talked about. It was vain to avoid the writing or the signing of bulletins: people would talk and newspapers would publish, and mere notoriety is, in some people's minds, a sign of merit.

I remember these things and note them, so as to have place for saying that, as reputation among the members of one's profession may rightly be sought as a great motive to self-improvement, so

the reputation among the public alone can scarcely be sought, directly and on purpose, without great risk of damage. A full measure of good public repute is certain to come, without being sought, to all who deserve it, whether for their knowledge or for their carefulness, laborious attention, gentleness, or other good qualities; but reputation, as measured only or chiefly by money, may be obtained by the most ignorant through self-assertion, self-advertisement, or mere impudence.

The lease of the house in Henrietta Street expired in 1858; and the time coincided with the increase of my income and my family nearly enough to justify my taking the larger one in Harewood Place, in which I have lived ever since. It was deemed a risk; for the place was not a thoroughfare, and no one of the profession had ever occupied the house, and Hanover Square had never had a successful surgeon in it. But it answered; the house was quiet, comfortable, and healthy; and the happiness I have enjoyed in it is far past counting.

Speaking of risks, the thought comes of those which a professional life such as mine involves; and though, of God's mercy, I have passed through them unharmed, yet I must doubt whether, if they could have been foreseen, any prudent man would have faced them. They may be nearly summed-up in the fact that if I had died before I was 47, I should have left my wife and children in extreme poverty. Before this time, I had not been able to save a shilling: my debts had been cleared-off

some years previously, but my increasing income had only sufficed for the increasing expenses of my family and my practice. The largest life-insurances I could afford would have been very insufficient for the bringing-up of six children. If I had died or had become unfit for hard work before I was 60, they would have been very poor.

It was well for my working-power that while these risks were present they never seemed so terrible as they do now: it was as in all the warfares of life, in which many dangers are not clearly seen till they are over, and are escaped the better for not having been exactly measured. Certainly, if I had not been rather reckless about my health, I should have given-in: for my inheritance of gout, finding occasions in consequence of overwork, brought many hindrances, including six attacks of pneumonia between 1851 and 1870, and constantly recurring lesser troubles which, if they had been cared-for, would have made hard work almost impossible.

But the risks were happily escaped, and the hindrances, being resisted, were harmless, and I could thoroughly enjoy my work, though at times it was very heavy. Especially, it was so during the later years in which I remained Surgeon to the Hospital and Joint Lecturer on Surgery. I observed the admirable rule which had been set, especially, by Lawrence and Stanley, of attending the Hospital on at least 6 days in the week, and of never refusing to go to urgent cases at any time by night or day. It is a rule which I think all surgeons to large Hospitals should observe and

allow none but very urgent engagements to disturb. But it brought very hard work. It made it necessary to perform, so far as was possible, all one's operations on private patients, and to visit all the more important cases, between 8 and 10 in the morning: then came very active and sometimes too rapid consultations at home, in which, not rarely, from 15 to 20 cases had to be seen in about 3 hours; then the Hospital-practice, taking from 1 to 2½ hours; then the visiting of private patients in various and often distant parts of the town. There were very seldom less than 11 hours' constant work between breakfast and dinner, often there were 12 or 13; and after dinner came letter-writing and case-keeping and some reading or other work till any requisite time in the following morning. This routine was seldom interrupted except by the need of seeing cases far out of town, which had to be done with the help of trains in the late afternoon or at night, and was often a grievous, though it might be a lucrative, hindrance to one's regular work. Such travelling amounted, in the most active years, to from 5,000 to 8,000 miles in the year. The average working-time was not less than 16 hours each working-day, if the time may be counted as work which was spent in various appointments, such as those in the Councils of the College, the Royal Society, and the Medico-Chirurgical Society, and in the Medical Council, in all of which I did my full share of the business.

I do not know how long I could have stood this work. It was brought to a change by what may seem like an accident: I was poisoned in a *post-*

mortem examination at the Hospital in 1871, and this led to a severe illness which lasted three months, and of which the danger and the length might be ascribed, in some measure, to my having been exhausted or 'used-up.' It seemed prudent that I should resign the Hospital-surgeoncy, and I did so with the greatest regret, a regret which was hardly diminished by the honours to which my retirement from the Hospital gave occasion. It was, practically, the end of the chief occupation of 37 years of my life; and they had been very eventful years, full of work and with many doubts, uncertainties and great difficulties, but with a great balance of happiness. Especially in the later years the School had been prosperous and had become completely peaceful: many of my old pupils had become my colleagues and there was not a dispute among us. Besides, with separation from Hospital-work I could not but foresee the danger of becoming less fit for some of the chief parts of practice, especially that of operating and that of managing the worst cases of injuries. And there was the loss of the happiness of association with students, and of the pressing necessity to be clear and exact in one's own study of cases, so that they might not err or might not detect one's self in error.

Soon after my resignation Her Majesty conferred a baronetcy upon me, an honour of which I may speak in another chapter. In this, relating to my practice, it may be noted as an occasion of danger. It is apt to suggest that one is about to retire or to cease to be active, or that one has got enough

and is willing and ready to have much less to do. I have known such an honour bring serious losses, and I took care to be even more than usually active after receiving it. I was conscious of escaping the danger, and for the next seven years my practice regularly increased; but, by this time, I felt that I ought to give up operating, and, as already said, my income at once fell to about two-thirds, then to little more than half of the largest amount it had reached.

It was a heavy loss of income but, happily, I could afford it; and, perhaps, by being enabled to work for more years in the diminished practice the loss to my children was nearly compensated. But, however this might be, I am sure that I did right. I had carefully thought of it, and had consulted my brother and Sir William Jenner, both of whom agreed with me. I was very heavily worked; was 64; liable to trouble in my lungs; not unlikely to break-down in such rush and haste as I sometimes lived in. I had already, many years before, given up all special operations: still, too much remained: and, as I could no longer put aside any part of what remained, I gave up the whole. I lost nothing but income by the change: in everything else, there was clear gain; gain of time, of freedom from responsibility; and gain of esteem, as being no longer in sharp competition.

I have written on what may be called the ways into practice: they are in every respect various, probably more various than I have learnt. And there are many and various ways out of practice,

which some of my readers may do well to learn and avoid.

I need not do more than name the ways through ill-health, or gross misconduct, or obvious stupidity, or a careless neglect of business. These are sure and well-known. I had, happily, no experience of any but the first: and, of this, it was observable how, after every illness, there was much larger loss of practice than that which was directly due to the inability to work. For, long after one had returned with good health, the disrepute of invalidity continued, and made people say that one could not be pressed for work, or risk the cold or the night-air or any fatigue or I know not what besides. It often made me think that idiocy would be a less hindrance to success than invalid health was.

But there are other ways out of practice which, for the most part, are incident to the later times of life and to those who have prospered. I have been able to observe many of them, and even with some self-amusement. One way is through prosperity. It is obvious to some sagacious people that he who has been very prosperous must have become indifferent to practice, and must rather wish to get out of it. Then, happy in their sagacity, they talk of what it has taught them; then, confusing their own talk with that of other people, they are sure that they have heard what they have imagined, and soon they are sure that 'it is really no use going to him.' Besides, they are sure that 'he has raised his fees'; of course he must do so, and they are now very large, much more than most people

can reasonably pay—or, he never sees patients now, except in consultation, or never after dinner, or without distinct appointment. Of all these things I have been assured, and all of them I have heard said of others—all being mere inventions or false guesses by people who are sure of everything and who must talk; many of them being, indeed, the same silly and inaccurate people who have, with as little knowledge, talked one into practice.

More real and true 'ways out of practice' are through deaths of friends with whom one often had consultations; and through the increasing repute of juniors, and the increasing practice of their pupils, who are ready to consult them as one's self was called-in by one's own pupils. And then, as one grows not only older but old, activity diminishes, almost unconsciously, it may be, to one's self, but evidently to others. And with diminished activity there comes diminished skill; not always in all things, but always in some. What these are may, I suppose, vary in different persons. In myself I could observe it especially in prescribing—one narrowed one's range of medicines, learning none new, forgetting many of the old; then also the knowledge of some 'special' things—these one gave up, partly for conscience-sake, partly for the avoidance of self-discontent. Again, one could not keep pace with the increasing knowledge; one could not read a twentieth or a fiftieth part of what was published; nor attend the meetings of the Societies, increasing alike in number and activity, and chiefly occupied by keen

juniors. Besides, as one's practice diminished, so did one's opportunities of study, and provocations to alertness.

MEDICAL POLITICS.

I think that I should never, of my own choice, have engaged in anything that could be included under this name; but, as a member of the Council of the College of Surgeons, to which I was elected in 1865, I had to consider many questions concerning medical legislation, education, and the like; and the number and variety of such questions increased when I was elected to be a member of the Senate of the University of London in 1860; and a member of the Medical Council in 1876; and Vice-Chancellor of the University in 1883. Having to study all these things I gave my mind actively to them, and spent as many hours as any of my colleagues, even the most active of them, in any of these several institutions, in councils, committees, and discussions. I was always in favour of what was regarded as progress: but my love of peace, and the habit of trying to make the best of things as they are, and my belief that legislative changes have really but little influence on the advancement of knowledge, made me a very mild reformer. I had a full share in bringing about the improvements of the last twenty years in teaching and examining and in the general management of the affairs of the College and the University: but, whenever I look back on all this part of my work, it seems to me as if there were less good done, in

proportion to the time spent, than in anything in which I have been engaged.

And this has often led me to believe that in my own profession, and to suspect that in all other callings, the influence of whatever can be called politics is immensely over-rated.

In my own profession, the most vehement discussions have been about elections to this or that council or other governing body, about rights to vote, manners of voting, and the like. Men have disputed on these things as if the personal rights, the social station and honour of every member of the College or University, and even the progress of knowledge, were involved in them. Especially, the right of election to the Council or other Governing Body has been deemed as of vital importance.

From all that I have heard and read in these discussions, I do not doubt that the electors are the happier, the more likely to work for the good of their College, and to feel the more bound to behave honorably as members of it, if they have or think they have something to do with its government. But that this method of election is necessary for the obtaining of the services of the best men, or of those who may be deemed most representative of the profession, is sheer nonsense. I have never known a really good member of the Council, an earnest, active, and wise member of it, ready to do all the work assigned to him in committees, and in whatever might be useful to the College or to the profession, who would not have been elected by the Council itself as certainly as by the Fellows.

I will take the case of the College of Surgeons, which I have known for 30 years. Here, I think it certain that some of the very best members of the Council—for example, Mr. Cæsar Hawkins, Mr. Arnott, and Mr. Quain—would not have been elected by the Fellows, or would have been elected with discontent by many who would have rushed to the poll for others who never did the smallest good, but rather hindered progress. On the other hand, I have known several elected by the Fellows, canvassed for, written for, set-up as sure reformers, who turned out utterly useless—incapable of business, incapable even of learning what their business ought to be, and not even troublesome enough to have any influence. And it was very notable that in all the canvassing and journalising at elections, no one was ever put forward on the ground of his ability or desire to promote the scientific work or influence of the College.

It is very difficult for an old man—say for one who is 70, and not unhealthy—to observe all the changes which in the passing years are in progress in him. Even in many things which he can see and feel, and which are certainly changing in him, he may be unable to discern the change. No man over 70 walks with the same pliant, elastic, easy step as he walked at 30 or 40; but many, over 70, I think are not conscious of the change: they can see it in others, they cannot feel it in themselves. Anyone, I suppose, could discern the difference in voice and speech of a friend over 70, while he remembers what it was 20 or 30 years before; but

to the old man himself, I suspect, the change is often imperceptible. He does not observe the diminished range of notes, or the veiled sound of his *s*, or, worse still, its shrill whistle. It is only when he puts these and the like things to a careful test that he finds the change. He may find it by timing his walk—his full speed may be half-a-mile less in the hour; or by trying his voice—he cannot reach his former highest or lowest notes, or sustain any note so long as once he could. And so it is throughout:—the change has been so gradual, that it is only with care that even the accumulated contrast can be discerned. With such care, the changes can be seen, and so can the reasonableness of the diminution of practice. Herein is one of the many things in which the old need education as much as the young do: they need self-examination, self-teaching. The 'I will' is, in many of their designs, slow and hesitating and procrastinating. Their word should be 'I will now,' and the work should follow instantly.

END OF THE MEMOIRS.

MEMOIRS AND LETTERS

OF

SIR JAMES PAGET

PART II. (1852–1899.)

1

24 HENRIETTA STREET, CAVENDISH SQUARE. 1852–1857.

THE first few months in Henrietta Street brought an unexpected amount of private practice; then, for a time, it fell off again: and in 1853, beside this uncertainty, there were the heavy anxieties of illness, and of the debts at Yarmouth. Many years later, Sir James Paget said that the move to Henrietta Street was one of the greatest risks that he ever took in his life. In 1854, at last, came steady success in practice: he was at this time 40 years old, and had been qualified 18 years. His friend Lord Acton remembers that he first heard his name so far back as 1849; and heard, even then, that he was 'the first man of his day.'

1852.

This year, he gave the last course of his Lectures on Surgical Pathology, and resigned his Professorship; and set himself to prepare the whole series of the Lectures for publication. His letters to his brother are chiefly concerned with his work, and with his brother's candidature for the Mastership of Caius College:—

1. *Jan. 20th*, 1852.—All works well here; indeed, I have had a surprising success since I came; good cases falling-in in quite unusual number. Of course, I cannot expect this to be

more than a casualty (*sic dict.*), but it is encouraging, because some of the cases are such as I should not have had at the Hospital.' At any rate, the propriety of the move is not yet manifestly questioned. *April 22nd.*—Practice, thank God, goes on well, even much beyond my expectation. I have seen nothing of the Electro-Biology: but I am clear that the whole subject ought to be investigated by honest and good men. I do not go near it, lest I should be asked for an opinion; but I would study it with any committee of competent observers, and should feel sure that some fine truths would come out from the utter nonsense that now hides them.

2. *May 26th.*—I should be glad of your opinion as to whether I should hold any longer the Professorship at the College. The reason for considering the question now, rather than in any former year, is that I have this year completed all the chief subjects of General Pathology, and intend to publish my Lectures as a complete book on 'Surgical Pathology.' I spoke to you about this, and am clear that it is a desirable thing to do: but the coming thus to a station makes me think that I had better now consider whether I should resign this year, or hold the Professorship (if, as is probable, I should be re-elected) for two or three years more.

As far as I know them, the advantages of holding it are (1) that it gives me station, above my age and practice: (2) that it brings some measure of good, by reputation, to the School: (3) that it brings me some, but probably not much, practice.

The disadvantages are that the work necessary to give the lectures well is so great that it leaves me no time for studying such more practical surgery as I find every month more need of knowing. You know how imperfect my surgical education was: so that, till I was assistant-surgeon, it had been always of necessity put in a place of second or third-rate consideration: the necessity of earning money had always made me give my chief, and nearly sole, attention to other than mere surgical studies. I feel this still in my daily practice; and I therefore feel as if it were my certain duty, as well as my interest, to remedy the defect as soon as I can.

Again, it seems now certain that, if I live and continue well, my life will become more and more practically surgical: the currents of my thoughts, and my opportunities of study, will be more and more in this direction; and if they must be so, they had better be so with all advantages. I know that whatever success has been granted to me, has been in those things to which I have given the whole or the best part of my strength;

and that it has always seemed to be because I did my best in whatever calling each time of my life brought me to. And now, when it seems as if surgical practice were to come to the first share of my time, I feel as if I ought to give it the first share of my thoughts too.

Moreover, whatever thoughts I may allowably entertain of taking a lead in my profession, or of improving it by my work—all these are favourable to the same view. It is impossible that I should now do much in physiology: the most that I can expect practice and the Hospital will let me do in this direction, is that I may be able to keep up my physiological lectures creditably. But I am very clear that if (D.V.) I work in surgery as I have worked in my other subjects, I can do something in it. There is scarcely any one in England so working—scarcely one who reads a foreign surgical work, or who sets himself to the study with the same resolution and point as one has been obliged to have in studying modern physiology, and such things as I have lectured-on at the College. All advantages of reputation, therefore, seem to be in the surgical direction.

The sum of all is—the time seems come when I must study more practical surgery, whether I like it or not: shall I then give it the first, or a lower, place? I do not say, the sole place: for I am not likely to give up either the subjects, or the style, of my studies hitherto.

3. *Aug.* 31*st.*—Shall I call my book 'Lectures on Surgical Pathology,' or 'Lectures on General Pathology?' I had chosen the former, wishing the title to be rather within than beyond the contents, and wishing to appear as much like a surgeon as I can: but I am advised that 'General Pathology' would be better. Then, to whom shall I dedicate it? I should say 'yourself,' but that publicity is hardly appropriate to my feelings towards you. It might be to the Council of the College, but that I have no great respect for their deeds as a body, and that there are some members for whom I cannot profess the least professional esteem. It might be to one, or two, of my Colleagues, but that I am unwilling to appear, on such an occasion, as one of a party, or to suggest any notion of preference. Then, I have thought it might be appropriately dedicated to Latham and Burrows, who (D.V.) saved my life in the fever. What think you of this?[1] *Sept.* 30*th.*—Australia is

[1] The Dedication is—'To P. M. Latham, M.D., and George Burrows, M.D., whose skill has been permitted to preserve my life, whose friendship adds largely to my happiness, and to whose teaching I shall attribute much of whatever good my work may do, I dedicate this volume, with gratitude, affection, and respect.'

beating us. Yet I have no reason to suppose that we shall lose in proportion more than other Schools by the exodus to the Gold-fields.

4. *Oct. 18th and 21st.*—As to the Mastership (of Caius College), all the thoughts I can have are those of the most earnest hope that you may be elected. It is useless to write, or, for me, even to think more: I have no pleasure in balancing chances such as I can only guess at. I can only hope and pray for your success. It is some consolation that, if beaten, it will be by one not your junior, or your inferior, but by a man against whom I suppose no one in the University would have been more likely to succeed than yourself. A better consolation is that we have all been very happy while working hard, and, if God grant us health, we may still be so: and even, with equal happiness, more useful than in the dignity of a Mastership. I hoped that at least one of the family might be free from the necessity of daily labour—but perhaps it may be best, even for our mutual love, if we are kept under the conditions in which we have hitherto lived and worked together.

5. *Nov. 5th.*—It will not decrease your disappointment to hear of our's, nor decrease our vexation to tell it. It is very keen: and let that alone be said of it: we must mend the cause of it as we best may, and (D.V.) the loss may yet be unfelt and half-forgotten. If we have health from Him, we can live, as heretofore, very happily: and, for yourself, there is dignity equal to that of a Mastership even in Cambridge, and superior to it elsewhere, if you like to take the Professorship and to make (as you easily may) some scientific reputation in it. I wished, indeed, most fervently, that the need of working had fallen to my own lot alone: for I am thoroughly more than content in the need, and I have always thought you fitted, as completely as I know you deserve, to live and do good in a higher and less laborious station. But work seems to be the condition of living, in our family; and may God grant us the content and enjoyment which He has so often sent with the same condition to others, and to ourselves to this time.[1]

[1] In other letters, he is very angry over a side-issue that arose out of this election—'Never, surely, was any such thing more utterly disgraceful: never was it more proved that no tyranny or injustice can match that of radicals or reformers in a majority. One might have thought or hoped better of educated men; but one seems to be justified, every day, more in holding that radicalism is the child of temper more than of knowledge or intellect. It is so with ——; he is merely, in these things, a man of temper; and of temper so wrong and strong that he consults nothing else when it is disposed to have way.'

1853.

Early in 1853, he had a severe attack of pneumonia; and, on February 14th, my mother writes to George Paget:—

I much fear that he will *even now* not be induced to take due precautions for the preserving that health God has so graciously restored to him. It has been no slight sorrow one has just passed through, and but for God's mercy dreary and desolate enough might I have been. Now I know I may speak of the future to *you*, and ask your counsel. None but myself know the fatigue, the exposure to weather, the depression, the utter 'used-up' condition in which he has frequently been of late. Ever since the last sad Yarmouth pressure, he has been utterly regardless of everything but saving every sixpence. To my entreaties that he would take a cab, his answer has ever been, 'It *can't* be done, there is no money for it.' On Saturday night, when speaking to me on this subject, he said, 'I have been knocked about like an old horse, from cab to omnibus, from omnibus to the street'—and this is literally true: he has not unfrequently, through the rainy weather, started for lecture, determined to allow himself only an omnibus, 4 or 5 have passed him full, he has walked on the whole way, and entered on an hour's lecture exhausted and dispirited. His practice, though of course variable, has I believe steadily increased, and he now has patients appointed to see him at home, Wednesday and Thursday. There is everything to make one hope for the future, though the struggle must be a hard one. From Yarmouth, they kindly write 'Do not let James work so,' but it is of no use even thinking thus.

He published this year the Lectures on Surgical Pathology. On October 18th (St. Luke's Day), he writes of the birth of his third son—'Tis a propitious day for a doctor's boy to be born on: God grant he may never disgrace it.'

Letters to George Paget. 1853.

1. *Feb. 17th.* (*After pneumonia.*)—Thank God I can again write to you. All appears to be going on well: I have nothing that I can feel to be wrong, except my feebleness, and this I trust is daily decreasing. I cannot bring my mind to accept your hospitality. My practice is as yet (so far as I can judge)

so precarious, that I dare not lose even a single case. I have few regular patients; every one who comes is from a new source, and may make a new connection; and of those who come, any one may lead to a fee which I cannot afford to lose. I am, on every ground of interest that I can see, utterly averse from leaving home, and I shall fight against the prescription to the last, or till there seem really no need for it. I will take every care of myself here. Not indeed that I can charge myself with more neglect of late than a poor man must submit to: but, for a time, I will live like a rich one, and not expose myself at all. *March 16th.*—I should be glad if the tide would turn: it has been long ebbing: and I hoped for at least the 'slack' this year. However, I shall hope still: the time I have worked against this tide is not more, I suppose, than might be expected, considering the conditions in which I started; and, in the opinion of all, I must believe that it will turn soon. If it do, and if it run to a high flood, I will not forget how you have helped me. I continue, thank God, very well, and able to work continuously.

2. *April 8th.*—I will send you to-morrow a box of microscopic specimens, and they shall be the least medical that I have. These are I fear the only contributions that I can make to the amusement of the Ray Club: for I seem to remove, every year, further from Natural History—not that I do it willingly, but London smoke and London necessities seem incompatible with it. *May 20th.*—I would have sooner answered your kind note, but that I was urgent to finish the MS. for my book: and, a few minutes ago, thank God, I wrote the last line of it, and ended, at least for a time, the work of many years. . . . I fear I shall not reach October without needing your help: for I am still suffering with what seems like the caprice of practice, seeing twice as many patients as I did last year, but earning much less money—catching none but little fish. The contrast is quite remarkable: but I hope, and believe, that it implies the coming of more profitable times, which (D.V.) the book may accelerate. I am very sorry to hear of ——'s ill-health. Each year one lives, one wonders more at women: and admiration of them gains new meaning, while losing nothing of its old one.[1]

3. *Aug. 20th.*—I very much wish I could leave, next Saturday: but I expect to have at least one heavy operation:

[1] He writes in the same spirit to a friend, in 1855—'I hope Mrs. —— goes on well. Oh, how little *men* would tolerate this weary waiting for suffering.'

it will be my week: and I shall be alone of the Surgical staff in London. I really therefore cannot come down, much as I should enjoy it. Thank God, I am feeling thoroughly well; and having (for the first time these twelve years) neither book, nor lectures, nor catalogue, in hand for publication, I am working less than, I think, I ever did before I came to London. I do not play; I fear my taste for play is almost gone: but I work lightly, and take my full sleep of nearly eight hours at night, and have no weariness. If I had but money of my own in hand, I should feel extremely like a gentleman. *Sept. 17th.*—I am, this year, utterly overladen; my pocket, as you too well know, is more than emptied; my health is blown upon; and I seem at last to need even rest of mind. I cannot yet bear more responsibility. If it were not for your confidence, I sometimes think that my hope might fail.

1854–1856.

The 'turn of the tide' came in 1854, with the usua signs of its coming. In August, 1854, he writes that, if he can afford that brougham, his wife shall walk fewer miles in the week than she has often walked in the day. In January, 1855, he writes, 'I seem to have risen enough to have a medical dinner'—this was to be given to his seniors, to show his gratitude for their kindness, and his intention of coming among them—'Except it were with this view, my present means would not justify my feeding any but those whom I greatly love or pity.' In January, 1854, he was elected a member of the Philosophical Society of Philadelphia: in June, he gave one of a course of lectures on education, at the Royal Institution, and took for his subject 'The importance of the study of Physiology as a branch of education for all classes'—a hard thesis to maintain in those days: and in August, he was appointed to examine candidates for assistant-surgeoncies in the service of the East India Company. On April 19th, 1856, he was elected a Foreign Associate of the Société de Biologie; and, on Dec. 31st, a Corresponding Member of the Société de Chirurgie.

Letters to George Paget. 1854–1856.

1854.

Jan. 19th.—I have been much of the day in the Court of Exchequer, waiting to give evidence in a case of supposed wrong

surgical practice: a great vexation, for which I have little compensation except in that it seems to tell I am getting to be thought an authority. The case is deferred for a week: and I have only seen more than I had seen before of the legal roads to ruin. *Aug. 7th.*—You will be glad, and not less surprised than I was, to hear that Sir Charles Wood has appointed me Examiner in Surgery for the East India Board, under their new scheme for appointing Assistant-Surgeons according to merit shown in examinations. The appointment was made, I believe, chiefly by the advice of Sir James Clark. The gain direct will be not less than £100 a year—this is good, and enough to be again very thankful for.

1855.

1. *Feb. 27th.*—What a happy change, from that perilous cold. I escaped, thank God, unharmed through all: but I seemed every day to feel in danger. Practice, I hope, goes well with you. The cold, I suppose, froze mine up; and it has not yet thawed. I am doing scarcely anything—not yet so far on as to have no perception of such caprices. *April 25th.*—My pupil, notwithstanding your good help, was beaten at Lincoln: beaten by the County interest. They have a strange way of managing Hospital-elections there, and of letting the candidates do very little in the way of canvassing; else he should have won. However, it may matter little: there are more than enough opportunities for a good start at home, now that such crowds are gone to the War. I trust practice prospers well enough to meet the prospect of the yet higher Income-tax. I suspect there is proportionally less in London than elsewhere—the lack of money making country patients more chary of paying London fees, and even of taking journeys for advice to London. I hear of many who are doing less than for years past, and I share in some measure in the deficiency: but I may be content, if my loss comes of what is your gain. *May 22nd.*—I know no one who would be disposed to seek his fortune in Bedford. The only man 'waiting' at St. B. H. is ——, and he, I am sorry to say, with a stupid resolution, intends to practise in London, and unless something interferes will probably be elected to our next Assistant-physicianship. Any good man, who would come to us, and work, might be nearly sure of the next election; and that next cannot be more than two or three years off. Can you send us one?

2. *Sept. 17th.*—Can you not come up, as you say you would

like, on the 1st of October, and dine in our Hall? You would see a great many men whom it might be useful to renew acquaintance with: and it is a kind of anniversary that we should keep—for, as sons of the school, you and I come of age this year. How long, long ago it seems since that drizzling morning when the Old Telegraph drove into Fetter Lane: and we went to Joseph Jones in the Temple. Do come up if you can. . . . I had a case at St. Helen's near Liverpool yesterday —a great comfort in September—a great help to keep the shaking or gone-over balance right—and some advantage in giving me the first 36 hours absence from London that I have had for two years. *Oct. 6th.*—Our school will, I hope, reach an average: it will not be more. We ought to be higher: but I suppose we are all getting too old for our several places. I shall be glad of your opinion respecting the printing of my lecture (at the Royal Institution): my own was so against it that I had, of late, not thought about it: but to-day I find some opinions so clear in favour of printing it that I am forced to think I may have judged wrongly. As for reputation in speech-making, I have quite as much as I am ambitious of, and more I fear than is useful.

3. *Nov. 13th.*—I heartily congratulate you on your election to the Presidency of the Philosophical Society—'tis an honour to be proud of, especially now, when it is so hard for one who is working in our profession to maintain any connection with the sciences that are not very near it. I should very much like to contribute a paper: but I fear my days for research in physiology are past: I can scarcely even read enough to keep up my lectures: and I am unsure whether I can ever again have time to make original observations in it. I must see what can be done at home (D.V.) in summer mornings—and if I produce anything fit for a paper you shall have it.

1856.

1. *March.*—I believe we should be prepared for rapid failure in my father's strength: he is very near, indeed, to the age at which his mother, after apparently unblemished health, passed through all the extreme infirmities of old age in a few weeks. It strikes me that he had better have more wine: for I gather that he has only two glasses in the day. I have great faith in that saying, *Vinum lac senum, lac. vinum infantum*; and I believe that the real secret of old Pennington's success in the management of old people was that he gave them all plenty of

port wine. I think my father would well bear four or five glasses a day; for it is only since he began to grow very poor that he left off taking two or three glasses a day. I feel nearly certain it would do good. *May 24th.*—I do hope this year to have an income above my expenditure, but it will probably be very small; for increasing practice, and passing time, bring increasing costs. You will be glad to hear that I have been elected an Associate of the Société de Biologie at Paris. There are but 20, from all Europe, and the other name proposed (at the last election) was that of Rokitansky. The decision was wrong: but not much the less flattering.

2. *Oct. 21st.*—At the end of my 'financial year' I find, thank God, an excess of income over expenditure. It is the first time that such an event has ever happened to me. I do not know how to feel thankful enough for this prosperity, and for the hope it brings with it that if God gives me health and strength I may yet work through to the 'owing no man anything' but love. A large share of it will be in my debtor-account with you, long after our money-transactions shall have been justly balanced. *Nov. 15th.*—What think you of an article on chloroform and other anæsthetics for the Quarterly? My present article is so far approved that I can now write on what I like: and my impression is that there might be, in many respects, more good than harm in writing an article once a year (keeping the deed as far as possible secret). The pay is not to be despised at present; I had 40 guineas for the last—just the cost of education for the children. *Dec. 18th.*—I do not know the purpose of your dining with Burrows, and should be as wrong, perhaps, in any guess at it as you are in thinking I am aware of it. I only suppose Medical Reform—some new scheme for inducing the Universities to give up the right to do what they do at least as well as any of the Colleges—some new sham remedy for imaginary grievances. I have the strongest disgust of prejudice against the whole matter. But I will hope that you are coming for something pleasanter: and, certainly, your coming will give me as much pleasure as if all Medical Reform were either finally settled, or for ever Burked.

1857.

In May, 1857, he gave the Croonian Lecture of the Royal Society[1]—'On the Cause of the Rhythmic Motion

[1] His old friend, Prebendary Kempe, remembers of this lecture that Bunsen, after it, said 'I never heard eloquence till now.' The lecture was spoken, not read.

of the Heart'—setting forth what he afterward called the 'Chronometry of Life'; the time-regulation and time-adjustment of all the processes of animal and vegetable life. He begins his lecture with an account of the work of Heidenhain, Stannius, and others, on the heart-beat of the frog, and on the presence of nerve-centres in its heart. Then he says

> But why are these nervous centres rhythmic in their action? Granting all that has been said, why is it that these nervous centres accumulate and discharge nerve-force, as it would seem, not only spontaneously, but at time-regulated intervals? To put on them, rather than on the heart's muscles, the work of rhythm, is only to put the real difficulty of the matter a step further back.

Therefore he takes simpler forms of life, 'in which we can have no suspicion of muscular structure, or of nervous, or of stimulus (in any reasonable sense of the term), or, in short, of any one of those things which we are prone to regard as the mainsprings of rhythmic action in the heart.' In these, also, there is rhythm; there are the rhythmic contraction and expansion of the vacuoles in Volvox and in Gonium, described by Busk and Cohn; the rhythmic movement of ciliated cells, and of the lateral leaflets of Desmodium, and of the yelk of the ovum of the Pike; and other instances:—

> All these make a heterogeneous list, if we look to structure or to office; their only apparent mark of resemblance is that they are rhythmical in action. . . . But there is another thing common to all rhythmically acting organs; they are all the seats of nutritive processes; and I believe that their movements are rhythmical, because their nutrition is so; and rhythmic nutrition is, I believe, only a peculiar instance, or method of manifestation, of a general law of Time as concerned in all organic processes. In other words, I believe that rhythmic motion is an issue of rhythmic nutrition, *i.e.* of a method of nutrition, in which the acting parts are at certain periods raised, with time-regulated progress, to a state of instability of composition, from which they then decline, and in their decline may change their shape, and move with a definite velocity, or (as nervous centres) may discharge nerve-force.

This general law of time-adjustment is manifest in

the concurrent development of all parts of an organism, in the recurrence of thirst and hunger, and in the daily rise and fall of temperature; in the sleeping and waking of animals and plants; in the movement together of stamina, the contemporary ripening of seeds in an ovule, and the dehiscence of fruits; and in many processes of disease:—

> In all organic processes, there is as minute a regulation of time as there is of quantity, or shape, or quality of matter. Time-work is not a singular characteristic of quickly rhythmic organs; it is a rule of life: and its rate in each organism is neither determined, nor beyond certain limits alterable, by external conditions, or by any appreciable qualities of weight or composition (as are the time-relations of inorganic masses), but is determined by properties inherited, and inherent in the very nature of the organism, and is least alterable by external conditions in the highest organisms.

Finally, he considers and answers the objections that might be raised to the doctrine that rhythmic action is the result of rhythmic nutrition; and affirms again the principle from which he deduces it:—'Rhythmic nutrition is a process in accordance with the general laws of organic life, very many organic processes being composed of timely-regulated alternate action and inaction, or alternate opposite actions, *i.e.*, being rhythmical, with longer or shorter units of time; and all organic processes being chronometric, *i.e.*, ordered according to laws of time as exact, and only as much influenced by external conditions, as are those relating to weight, size, shape, and composition.'

He speaks, in this lecture, of death from old age—'Rare as it may be, there is a death, even among men, in which, with uniform and synchronous decay, all parts arrive at the same time at the stage of incapacity for work.' He was thinking here of his father, who had just died.

On April 15th, 1857, he was elected a Corresponding Member of the Medico-Chirurgical Society of Edinburgh: and, in December, an Honorary Member of the Philosophical Society of Cambridge. In January, 1858, he moved from Henrietta Street to 1 Harewood Place, Hanover Square.

Letters to George Paget. 1857.

1. *April 6th.*—This morning brought me the account of our father's death; a solemn, rather than a sad, event; for it would be to wish that we were immortal upon earth, if we were to desire to die otherwise than he has died. He outlived all his griefs: and was, at last, hardly sensible of earthly joy; but it may be a source of great happiness to us that, so long as he could think, he thought happily of us, and that we have been enabled to assist in making the end of his life here serene and free from cares of this world.

2. *May 29th.*—I am sorry not to have seen you: yet not for the (Croonian) Lecture's sake; for, as I expected, much of it was not good for talking, though it may do to be read. I am quite content with having given it, though it cost me much in time and mind; and I think the doctrine of time-regulation as a law of organic life will take root and grow. *Sept. 8th.*—I am just now more full of work, I think, than at any former time of this year; of work, both in private, and in heavy hospital cases. I never got so much by the absence of others before; and I really cannot leave, though I would gladly take a holiday for pleasure's sake. I cannot plead necessity for rest; for I never felt better or fitter for work; but I strongly feel the necessity of work for that big sum which is to be paid (D.V.) in December. So I will be content in the increasing hope that I shall be able to clear that clean off. . . . Brown-Séquard has sent an abstract of my paper to the Académie des Sciences. He wrote to me more than once, maintaining that it ought to be done; and I felt that it would be greater vanity to refuse than to assent. But I advised that only the 'chronometry' part should be sent in; for the rest has nothing new in it. *Sept. 23rd and Oct. 5th.*—Thank God I have been able to save enough for this payment without cutting into my October earnings. It is a novel sensation, and a very agreeable one, to find my income surpass my expenses, even though the surplus is thus quickly swept away. The good result of this year is entirely due to increase of practice, and I am most thankful to say that the increase is of a kind which I may reasonably hope to go on. Here is my cheque—for the largest sum I ever drew for any purpose of my own—sent with a mixture of regret that it will sweep all my savings, and of gladness that I have been enabled to save so much. God help us still to obey His own command to owe no man anything but love. For the January payment, I must look chiefly to my

October earnings. I will work hard to meet it: and if (D.V.) I succeed, I'll keep a very jolly birthday on the 11th.

3. *Dec. 1st.*—I wanted to talk to you of many things—especially of the new house in which I hope soon to be living. I am nearly sure of getting one in Harewood Place—the short bit of street leading from Oxford Street to Hanover Square, with gates at the beginning of it. According to the best opinions I can get about it, and in my own, it is in an excellent position for business: for the house, though not in a carriage-thoroughfare, is next door to Oxford Street, and the way to it from Hanover Square, for carriages, is as good as can be. . . . If you had come up, I should have taken your opinion on a plan which I have for publishing a series of papers of 'Notes of Practice among the Out-patients of St. B. H.'—regular 'general practitioner' papers, referring to matters of practice which I think I have made out, and which it may be useful to myself and others to publish. I think I cannot be wrong in doing this: no such papers have been published before: and after this discourse on the heart, it will, perhaps, be prudent to show that one is thinking of practical matters. *Dec. 5th.*—Thank God, I seem likely to be able to meet the claims of January 10th with my October and more recent earnings. They will draw me very dry: but if there be a drop of moisture left, I will drink my own health very jollily on the 11th, and will start with a heart (D.V.) as light as my pocket on my 45th year.

Thus, in 1857, came the end of the home at Yarmouth, and the beginning of the home-life at Harewood Place. But, all his life, he moved upward: from the lower level of the early years, and the limited range of vision, to the time when he attained success in practice, and could see all round him; then, higher still, having left success behind him, in the increasing loneliness of old age; and last of all, in the time of utmost infirmity, highest of all.

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II

1 *HAREWOOD PLACE, HANOVER SQUARE.* 1858–1867.

THE house in Harewood Place was Sir James Paget's home for nearly thirty-six years, from January 1858 to September 1893. Some account of it may be put here; for all that side of Harewood Place has lately been pulled down, to make way for shops and flats. Everything is changed; the gates were removed long ago, Lord Harewood's house is occupied by the Royal Agricultural Society, and there is a Bank where his stables used to be. In the old days, Harewood Place was almost as quiet as the country; there was no thoroughfare, and no noise, only the distant traffic in Oxford Street. The house had its faults; but, for his work, and for home-life, and for hospitality, it was excellent—above all, in summer, when its broad stone staircase and landings kept it cool on the hottest day; the sort of house that is at its best in summer-time, with flowers everywhere, and windows wide open, yet with music undisturbed.

There were only two rooms on the ground-floor, his study and the dining-room, with the width of the hall between them. His study was very plainly furnished, and might have been made more comfortable for his patients: there was no surgical couch, or screen, or looking-glass—nothing to smooth-over or delay the consultation—only straight-backed chairs, and a horsehair sofa of old-fashioned shape. But the room was pleasant to look at; its walls were covered with books and portraits; the places of highest honour were given to John Hunter, Perceval Pott, Abernethy, and Lawrence; and to a portrait of Her Majesty Queen Victoria, that he bought out of the first fee that he received from a Royal patient. Among the things on the mantelpiece was the stethoscope that he bought with his first half-guinea, in the days of his apprenticeship; and, at either end of the mantel-

piece, the tall white figures of St. Bartholomew and St. James, casts from St. Sebald's shrine at Nürnberg, that he bought at Oxford in 1844. On the first floor, were the drawing-room and the 'school-room': and his practice, like John Hunter's, often flowed up to this level. In the drawing-room, flowers, and gifts from friends or from patients, were crowded everywhere; he writes to one of his sons, 'Mingling as one may the happiness of looking at the decorations of the rooms, and of remembering the personal stories connected with them, this house is the most charming ever known to me.' And one other room may be named here; the old nursery, which 'kept its state' even after all his children were grown up.

1858.

The move from Henrietta Street to 'the house over the way' was made at the end of January 1858. In March, he was appointed Surgeon Extraordinary to Her Majesty Queen Victoria. The appointment came as a surprise to his profession; he calls it, in a letter to his brother, 'the Extraordinary Surgeoncy,' and says 'You can hardly guess or appreciate the surprise that the report of my promotion has caused: but I hope and believe that no one but a certain number of my seniors thinks ill of it. I shall be in the Gazette, I believe, next Friday: in a different part of it (D.G.) from that which, a year ago, I should have thought more likely.' Later, he writes, 'The Mayor of Yarmouth is to present me with an address of congratulation from the Town Council on my appointment, &c. &c. ! ! ! Really our family history in relation to that town is a strange tale.' On April 26th, he was elected a member of the Philosophical Club.

In May, he had another very severe attack of pneumonia. During his illness, he spoke to Sir Thomas Smith of the feeling of being close to death, and said, 'It's just like coming home from a levée, and taking off your Court-clothes'; and told him, if people should wonder that he died so poor, to let them know that he had helped to pay his father's debts. In June, he writes of his convalescence, 'I have to report on myself—a singular obedience to rules, a growing satisfaction with the system of doing little or no work, a pleasure in

digesting recumbent instead of doubled-up, an increase of 3 lb. in weight, a marked gain in muscular power and in nerve, a total absence of bodily discomfort, a clear strong voice for speaking or singing—and, *per contra*, 0. Thank God for it all.' In the autumn, three of his children had scarlet fever. For their recovery, and his own, he placed a memorial window in the new house. Near the end of the year, he writes to his wife :—

Nov. 28th, 1858.—I see and do nothing but my work, and at the day's end am glad to feel how many evils of thought and word one is saved from by having one's mind so occupied, and by having no temptation to think and talk of other men's affairs and characters. I am every day the more sure that, not only in society, but in one's own heart and home, the more *things* are thought of to the exclusion of *persons*, the less is the sin and folly and waste of thoughts. I wish I could devise anything for your greater comfort at Brighton: I had a prosperous last week, thank God, and can calmly look in the face any bills you send me. *Dec. 5th.*—The more I think of the sickness through which our dear ones have passed, the more do I feel that our thanks should have no limit but that of our whole hearts and lives. Some thousands have died in this epidemic, and our's have been spared; thousands more have been made invalids for life, and our's have been permitted (as we may hope) to go unharmed; in a word, they have passed safe through the greatest of all the perils of sickness of childhood—blessed be God. You must tell me if there be anything you wish done before your return. I am so accustomed to leave all home affairs to you (and so happy in the custom) that I have no eyes for the needs or proprieties of the house or household: so pray instruct me for this time, and your teaching shall be obeyed. Last week again, thank God, was a prosperous one in practice: it is indeed no small mercy that we have been able to bear this great expense and to provide all that even the richest could have for their children's health.

1859.

On April 8th, 1859, he lectured at the Royal Institution on 'The Chronometry of Life.' In this lecture, which was the outcome of his Croonian Lecture, he traces the law of time-regulation and time-adjustment in many processes of life and of reproduction. This 'chronometry

of life' was always of great interest to him: and, more than thirty years later, he returned to it in his essay on 'Errors in the Chronometry of Life.'

On June 14th, he resigned his Lecturership on Physiology at the Hospital; he had held it for sixteen years. He gives his reasons in the following letter to his brother:—

April 15th.—The matter in hand with me just now is my lectures. When I last wrote to you of them, it was to say that (D.V.) I should continue them till I should have paid my debts: and that may have seemed, at the best, not more than a prudent design. But now I have decided (unless something quite unforeseen should occur) to give them up next month. My reasons are on the paper which I enclose. I carried it long in my pocket, and often read it, that I might be sure of deciding deliberately: and the more I read it, the more certain did it seem that I should be acting rightly in resigning the lectureship about the middle of May.

Now pray read them through; and if they seem insufficient to you, let me add that I have endured intense annoyance all through the last session on account of doing my work ill, or indifferently well, and not a little fear lest the ill-doing should damage the reputation I may have gained by better work in times past.

I should add, too, that practice has, in the last year, so increased as to make the risk of giving up so good a source of income less considerable than it was even last year. If my health holds, and I believe it was never better than now, I may reasonably hope (D.V.) to have an income, without the lectureship, considerably above my expenditure.

Enclosure.

The lectures do me no good, professionally. The greater part of what practice may come through the Hospital is through the out-patients' room and other practical work.

They occupy nine hours a week, all through the session: hours that might be given to

Practice,
Reading,
Original surgical enquiries,
Writing;

of which the last three are now totally neglected

After this session, they should yield not more than £300: for the number of lectures being diminished I should propose that the fees be so too.

Neglects—

No work in dissecting-rooms.
No examination *viva voce*.
No microscopic demonstrations by myself.
Nothing done in the Museum.
„ „ for the Catalogue.
The lectures given without any preparation whatever, and without any revision of the notes.
The students not personally known (not more than one in five).
The course of lectures incomplete, for want of a fresh arrangement and abbreviation,
—— and, probably, on many points inaccurate for want of reading.

A larger number of active teachers is absolutely wanted in the School, and I must either pay, or make way, for one or more of them.

The shame of the Hospital is in the holding of offices long after they ought to be resigned.

There, that's my view of the matter: which I confess to be sometimes surprised at thinking of coolly: but I am so strongly of the opinion I have expressed, that only a very decided opinion of your's on the other side would make me think I may be wrong.

The following account of his work and influence in Physiology has been written by Sir Michael Foster:—

The younger physiologists of the present day look perhaps on the name of James Paget as that of a friend of Physiology rather than as that of a physiologist. They know that he was a great surgeon, and a pioneer in Pathology; and they have witnessed or they have been told of various acts of his, in his later days, by which he assisted in the progress of their science. Few, at most, of them are aware of the amount of time and energy which in his earlier days he spent on Physiology itself. He himself speaks of his lectures as 'containing extremely little original matter, scarcely even any original thought.' But we, even though we never listened to one of them, have ample evidence of their excellence. Not only may we be sure that as expositions they were marked by unparalleled graceful lucidity and fluency, and illumined from time to time, if not by absolutely original conceptions, at least by an original philosophic mode of presenting an idea; but, more than this, the 'written letter' puts in our hands the means of judging to-day how admirable they must have been in substance as well as in form. The Reports which during several years he

wrote for Forbes' 'Medical Review,' making use of the material, thus gathered in, for incorporation into his lectures, shew how carefully he kept himself abreast with the knowledge of his time. And, indeed, what the lectures were is clearly shown by Kirkes' 'Physiology.' That admirable text-book was in its first edition wholly based on Paget's lectures, and followed those lectures closely in all the earlier editions. At that time, the only physiologist devoting himself wholly to his subject and not engaged in medical or surgical practice was William Sharpey, for William Bowman was already a busy surgeon. When we remember this, we cannot do other than conclude that Paget's influence had in those days a large share in promoting the advance of physiological science.

Paget's original contributions to Physiology were limited. As he himself has said, many things besides his own inclination led him to research in Pathology rather than in Physiology; and Physiology may console herself, for what she has thereby lost, by the knowledge of what Pathology has gained. Besides however carrying out many microscopic and experimental inquiries, for the sake of his lectures, by which the value of his expositions was largely increased, he made two notable contributions to physiological science. One, and that the better known, is the Croonian Lecture 'On the Cause of the Rhythmic Motion of the Heart,' delivered May 28th, 1857. This does not contain any striking original observations, but gives a careful account of the knowledge of the time, with many indications that the author had himself by experiment verified the statements of others, and expounds the results obtained in such a way as to lead up to the conclusion that the ultimate cause of rhythmic activity, of whatever kind, in living tissues, is to be sought-for in rhythmic nutrition. Such a view is a commonplace one now, and has become the basis of many speculations, as well as the starting-point of many inquiries. But to many, at the time, Paget's exposition had all the charm of an illumining idea.

The other earlier communication, in form of a paper in the Philosophical Transactions for 1850, read on Sept. 26th, 1849, is the record of a distinctly experimental investigation carried out with such care and ingenuity, and related with so charming a lucidity, as to make one wish he had written many more such. In those days, the vitalistic doctrines which in the preceding century John Hunter had so powerfully advocated, though they had been driven out from one position after another, still held their ground so far at least as to govern

the thoughts of many minds; and, in the memoir in question, Paget examines a well-known observation of Hunter's, on which that great man laid much stress, namely that a living hen's-egg may be lowered in temperature many degrees below 32° F. without freezing, whereas an egg which had, in one way or another, been treated so as to destroy its 'vitality,' froze at 32° F. Hunter concluded that the 'vital principle' present in the living egg prevented the freezing, by resisting ordinary physical forces; he regarded the experiment as a striking illustration of his views concerning the nature and mode of action of the 'vital principle.' By a series of well-devised experiments, Paget shewed that the cause of the untouched egg not freezing lay in some peculiarity of the mechanical construction of the contents of the shell, a peculiarity which was done away with by the means ordinarily adopted to destroy the life of the egg. He brought forward reasons for thinking that the peculiarity in question was connected with the viscidity of the albumen. And he clenched his argument with experiments shewing how an egg could be so interfered with that it froze at 32° F., and yet remained alive, since upon incubation it underwent a certain amount of development.

In the course of this paper, Paget incidentally alludes to some inquiries which he was carrying out 'on the life of the blood'; and there can be but little doubt that while he was lecturing at St. Bartholomew's, and at the Royal College of Surgeons, he was busy with many distinctly physiological investigations. But his mind was, from the first, bent on pathology; and thus his earlier researches bore fruit not as contributions to physiology proper, but as the basis of those wide physiological views of the nature of the processes of disease with which, under the name of 'pathology,' his name will always be associated.

Though, as time went on, the interests of pathology and the demands of practice rendered physiological inquiry less and less possible for him, he lost no opportunity of shewing his interest in physiological problems and of advancing or protecting physiological science. And when the 'Physiological Society' came into existence, it made him, with William Bowman, one of its very few Honorary Members, as a token that it regarded him as a Physiologist indeed.

1860–1861.

In 1860, he became a member of the Senate of the University of London. This year, also, he was appointed to examine candidates for the Army Medical Service.

In February, 1861, he had another severe attack of pneumonia. On April 3rd, 1861, by the resignation of Mr. Lloyd, and the appointment of Mr. Wormald to be one of the Surgeons to the Hospital, he became Senior Assistant-Surgeon: and on July 24th, by Mr. Stanley's resignation, he became one of the Surgeons. He was at this time 47 years old; and had been an Assistant-Surgeon for 14 years. In August, he took his first real holiday since 1844, and went with his wife and daughter to North Wales for three weeks—and flung up his hat in the railway-carriage, like a schoolboy, at the delight of getting clear away from work.

Letters to George Paget. 1861.

Jan. 29*th*, 1861.—All gladness is, for a time, clouded by a terrible event I have this morning heard of. Poor Baly was killed last night in a railway accident. Is not this awful? He was one of the few of my own date for whom I had a constantly growing esteem and love: beyond comparison, the best man of his age among London physicians: the best of my Hospital colleagues, Burrows scarcely excepted, and one of the best of professional friends. My last talk with him was about you. *March* 18*th*. (*After pneumonia.*)—I daily grow stronger. I have abundant reason to be more than content with the measure of my recovery: and I shall run no risks if I see them. But I could not have believed how hard it is to break from the habit of doing all one's work with all one's might, whatever it should cost. I am getting into work again slowly: but my loss by the illness has been heavy—heavy enough to justify all the expense of extra clothes, food, and I know not what, and of the real holiday planned for me. Lloyd has resigned; and I shall soon be Senior Assistant-Surgeon; and, if I live, I cannot now be far from the Surgeoncy, with one of my seniors 30, and another 20, years older than myself. But I am half disappointed in the prospect, seeing how little difference the promotion will now make in my professional position. However, I shall like the work, if I can do it thoroughly. *July* 4*th*.—Stanley resigned this morning, and (all well) in three weeks I shall be Surgeon to St. B. H. The goodness of the news may compensate for its brevity.

Aug. 26*th*. *North Wales.*—Your prescription has given me exquisite pleasure and done me real good. And I shall allow no suspicions now to be cast on my chest, when I have tested

it with Snowdon for my first mountain-walk, in the latter half of an active day, and have come down, as I did, hardly tired. I have been delighted too, with my first lesson on Glaciers, in tracing, with Busk's guidance, the proofs of old glacier-action on the rocks along Llanberis pass. I find that I could enjoy myself even more than I do, if I had but more knowledge: but my botany is nearly all gone, and geology I can scarcely begin now. Still, the pleasure of a vacation is intense: and you may rely on it that so long as I can thank God for such health, and ability to leave home, as I now enjoy, I shall not again need to be urged to take an annual holiday.

1862.

This year, the payment of the Yarmouth debts came to an end: he hunted up a heavy claim that had not been pressed, and paid it in full with interest. He writes to George Paget:—

Oct. 21*st.*—The thought comes that I should like to do, if I can, what I used to plan for days of improbable prosperity—pay those of my father's debts which were due to persons who did not persecute him or allow others to do so when they might have prevented it. Perhaps, among old papers, not far out of reach, you may find what I want to know. I need not say that I hope you will not hurry or much trouble yourself. If I can fairly afford to pay these debts, I will; their amount, I think, will not be more than the amount which you paid more than I did in the time of our father's need: so I shall not go ahead of you in self-denial, and I shall take the liberty, which you did not, of choosing my own time.

On Jan. 23rd, 1862, he was appointed Surgeon to Christ's Hospital, on the resignation of Mr. Lloyd. At the meeting of the British Medical Association in London this summer, he gave the Address in Surgery—'On the treatment of patients after surgical operations.' He writes to his wife, after the week of the meeting:—

I am again all alone—I never liked it less than this morning, after the hurry and overwork of part of the week, and the dinners, hot rooms, and speeches of the rest of it. Such a meeting is very well for once—but they must have special constitutions who can stand them annually. My first lonely Sunday does not make me feel grown independent, or self-

sufficient for my happiness. . . . I hope you will never bore yourself with accounts for my sake; indeed, henceforth I shall have no entries but of money given to you—you alone shall know what you do with it. I propose to begin my leave from the Hospital on Thursday, and take a month clear. It will be a good precedent for—I was going to say, the holidays of future years; but that is too long forecasting. May God grant us one this year, and make us very happy in it.

1863–1864.

The chief events of 1863 were his appointment to be Surgeon-in-Ordinary to H.R.H. the Prince of Wales, and the publication of the second edition of his 'Lectures on Surgical Pathology.' The following letters were written, between 1859 and 1863, to Sir William Turner, who helped him in the work of re-editing the Lectures :—

1. *June 14th*, 1859.—I am heartily glad that you have accepted my proposal. I can scarcely tell all that I shall have to ask you to do, till I can look over the first edition for myself: but that which, chiefly, I feel unable to undertake, is the study of what has been done abroad, since 1853, in general and minute pathology. I have only a very imperfect knowledge of what Virchow has written on 'Cellular-Pathologie,' and of what has been done, well and ill, by many, on amyloid degeneration, and on thrombosis, and emboli, and several other things. So that, briefly (to speak of), I think the greater part of your share of the work would consist in bringing-up the book 'to Saturday night' in these and the like subjects.

2. *Nov. 8th*, 1862.—I wish I could do the work faster; but, really, my days are so full that I am afraid to rob my nights of the sleep that full work demands. . . . The name of 'fibro-cellular' tumours must, perhaps, be kept; though it was adopted only to indicate the likeness to the tissue which is now called, throughout the book, 'connective.' Can Rolleston help us to a new name? His 'myeloid' has become current. And as the account in the lecture was the first general or collected one given of them, a new name might be justified.

3. *Feb. and March*, 1863.—I agree to all that you suggest, including that about 'blastema.' This I do the more readily, since an Orator has been applauded at the College for saying that it means nothing more than the 'coagulable lymph of the immortal Hunter.' . . . I wrote about Velpeau's statement, in my last; or else I dreamed that I did and said it was not worth

attending to. So I should say, either dreaming or awake. . . . I am as sure of the 'vitality' of liquids containing no organic shapes, as I am that solutions of salt do not contain crystals. Both beliefs may be erroneous, but I think the one is as probable as the other.

4. *March 24th*, 1863.—I send a short preface for the new edition. The more I tried to lengthen it, the worse I made it: the more I tried to explain what you had done and I had done, or why there would be only one volume instead of two, or why this or that change was made or not made, the more I seemed to be illustrating the principle (of which I have often felt convinced) that that which needs to be explained ought not to have been done. There is, in truth, nothing in this second edition that needs distinct explanation, except the fact that you have done the work. What I have done, has been too little to affect the general fact; and if you are content to take the praise or blame of the whole deed, I shall be more than content that you should have it. I think 'revised and edited by W. T.' will read better than 'Second Edition,' which one cannot quite dissociate from the 'Seck-kund E-dish-shon' which one hears bawled in the streets.

On October 1st, 1863, he gave the Introductory Address at the opening of the winter-session at the Hospital. Like the 1846 address, it is in praise of the 'motives to industry'; but it is less formal in style:—

Your engagement in this profession binds you, not only by considerations of your own interest, but by the weightiest responsibility to God and man, to do your duty in it with all your might. Keep this constantly in view; daily remind yourselves that you propose to take in hand the lives and the welfares of your fellow-men; daily think quietly of what all this involves; and then you will daily decide that not even your own lives must be much dearer to you than the duties of your profession. . . .

Your wisdom will be to make the best use you can of the plan that is appointed for you. Let no one make any special plan of study for himself; that never answers. I have known some that have tried it—eccentric men, who thought that nothing could suit them if it were good for others. But I never knew any good come to an eccentric: after walking for a time in a mist of self-satisfaction, he has almost always ended by being gulfed. . . .

Experience is of no natural growth in us; it is not commensurate with age. After about thirty, wise men may grow wiser, but unwise men rarely grow wise. Therefore there are many old men with no experience at all. At the right time of life—that is, at your time of life—they did not learn how to learn; and ever since, though working in the field of knowledge—working, it may be, as hard as wiser men—they have been gathering only weeds. Among these are they who, if I may use the sacred allegory, are constantly sowing tares among the wheat of truth. . . .

You will be tempted to make displays of cleverness; to wish to seem able to do your whole work, whether in study or in practice, easily and yet well. Why is it that nearly all of us are so much less anxious to be wise than to seem clever? Surely good education should teach us all that nothing good was ever easy. Now, educate yourselves into the dread of being merely clever; for I am sure that anyone who will fairly review the errors of his practice will find that a very large portion of them must be ascribed to his having underrated the difficulty of that which he undertook—to his having tried to be clever when he ought to have been wise. Oh, beware of mere cleverness! . . .

And there is yet another temptation against which I venture to warn you. That which will most harass you in your practice will be the apparent success of dishonesty. You must be prepared for it; for it will not cease in your time, if indeed it ever does. In our department of social life, as in all others, the supply of rogues is duly proportioned to that of fools. For the most part, medical dishonesty is but the complement of non-medical folly. Therefore, until there is a widespread teaching of natural science, there probably will always be much success in quackery. . . .

The burden of my address is work, lifelong work. And so it is, and so it must be; there is no success without it, no happiness without it. A kind of success, indeed, there is without it—the getting of money without honour—and to that there are many ways; but we do not teach them here.

On Jan. 6th, 1864, he was elected an Associate of the Société de Chirurgie; and, on Feb. 1st, a Member of the Accademia de' Quiriti di Roma.

Letters to George Paget. 1863.

Jan. 25th.—Business goes on busily; but not more pleasantly. The additions to one's number of private cases are for the most part less interesting than those which were less numerous: and the number at home and at the Hospital leave me no time to study them. I vex myself with feeling that now, when I have great opportunities for study, I have no time, and do less than when I had time enough and fewer opportunities. *Sept. 18th.*—I should immensely like to come to Cambridge; for nothing could be pleasanter than, after business, to talk over our recent tour, and the places that we have now both of us seen. But, respecting the fee—the shabbiness with which Dr. —— was lately treated by —— has hardened me in my resolution not to go to cases in the country for less than the regulation fee, unless indeed some very evident reasons for my doing so can be given. . . . I am really very sorry to write thus; for it is a loss of real pleasure, and of some profit, and may seem only half-courteous to Mr. —— and yourself: but I have thought very carefully on the whole subject of country fees, and am sure that only well-justified exceptions should be allowed to the general rule. *Dec. 21st.*—I write for all here to wish you many happy returns of your birthday, and that all of them may find all whom you love happy around you. We cannot hope for happier years than some of those that are past: but it is not wise to make such comparisons; the present always suffers; unless, indeed, when one can look forward hopefully for the next generation. Thank God, we can do this.

Letters to his Wife. 1863–1864.

July 19th, 1863.—I miss you more on Sunday evenings than at any other time: and what years of happiness we can reckon by these evenings—happiness, thank God, unbroken, and, though not without change, never becoming less. . . . We have been this evening to Pinner, my first visit since my sisters went there.[1] Their rooms are charming—if I could wish for a country-retreat, it would be for such an one as they have. *July 27th.*—My life was never more than now a mere routine. There are no dinners to abuse, no meetings to elude, no time-wasters to talk to—only a fair level of practice chiefly

[1] His sisters, with Frederick Paget's daughter, had made their home at Pinner, near Harrow: it was a sort of treasury of all that had been saved from the loss of the old house on the Quay.

among strangers. But I ought not to omit to tell you an omen that I may yet succeed in my profession—I was consulted a few days ago by Dr. CHAMBERS himself. I need say no more! *Aug. 2nd.*—It adds to the damage, done by my work to the comforts of Sunday, that I do not hear of you. I have again had too much to do—constant work from 9½ to 6, with the exception of the time for morning service ; and tiring work too. It is the greatest drawback from the good of my profession, and yet I am nearly sure that I do no more on Sundays than I am forced to do, or bound to do for charity or kindness. . . . I am ashamed to find how I reckon on being again with you, and having again a release from business. I have never before (unless at some time of special annoyance) felt so anxious to be away ; I could half-wish that I had never taken a holiday, or learned how pleasant the contrast from work is. I fear I shall never again be content to spend a year at home—blessed and happy as the years past have been. But this is a grumbling letter, and I am only illustrating how hard it is to feel regret or anxiety without losing one's temper. *June 2nd,* 1864.—I have had a full day's work: not a hard one till it came to the dining-out. I am ashamed and angry with myself that I can so little enjoy what kind people take so much trouble to make agreeable. I ought to have been and to remain very happy: for everything was good to the senses and nearly everything reasonable and sensible—but I could not enjoy myself, and sat (as I sit now) with a feeling of kid gloves in my stomach, and white neckcloth round my brains.

1865–1866.

In January 1865, he again had pneumonia: he writes to his brother of it, 'This last illness of mine must go by the same name as the old ones, for I have had pneumonia—a little even in each lung. I am chiefly sorry for my illness on account of the distress and anxiety it has occasioned you all. It is harder than can well be imagined to keep from such illnesses—*i.e.* to insure the amount of sleep and food required for such work as I must do. The scheme for avoiding dining-out, of which I wrote to you, was for sleep's sake: and, if adopted only a little earlier, would have saved me, I think, from this last trouble. It must be thoroughly carried-out now ; and so must some more very wise resolves, I suppose.'

In July 1865, he was elected a member of the Council

of the College of Surgeons. In October, he gave the Inaugural Address at the opening of the new buildings of the Leeds School of Medicine. This year, also, he was appointed Joint Lecturer on Surgery at St. Bartholomew's Hospital, with Mr. Holmes Coote: he refers to these lectures in the following letter to Sir William Turner, written soon after Sir William had become Professor of Anatomy at Edinburgh :—

I am very happy to hear of your large class. I can feel with and for you the immense pleasure of lecturing to full benches of attentive men. Many and great as have been the pleasures that I have derived from my profession, none has been so great as this. And now, after some years' lapse, I have it again: for my surgical class is the largest in London, and larger than it has been at St. B. H. for fully twenty years.

Letters to his Wife. 1865–1866.

1. *July 17th,* 1865.—My practice is almost gone: and I might shut the shutters without great loss. Unless something new comes in, I may dine to-morrow at half-past three! I shall begin to think of taking pupils—or writing a pamphlet—I shall go to the Crystal Palace or the Royal Academy or Astley's! You may well say 'Come to Northaw,' but, seriously, I cannot quite do this. *July 28th.*—Yesterday's absence from work induced very heavy work today: I have been constantly busy for the last 14 hours (only meals allowed for, and one of them in the carriage)—Work has set in again, I think, and I might suppose London refilling; and to-morrow I have to see a Baron, a Viscount, a Countess, and a Marquis!!!! *Cock-a-doodle-Doo.* I am very tired of being without you, and you may be sure will come at the first chance.

2. *July 31st,* 1866.—My long journey was not a very pleasant one—for I had to be driven 12 miles beyond Sheffield, over a rather bad road, during pelting rain and a high wind, between 3 and 5 A.M. I had scarcely seen a Yorkshire moor before. In brighter weather, the scenery would be nearly beautiful: to-day it was wild and murky, and, if at all grand, grand only in its desolation. And here's a day—a match for the best of all bad days, that drove us from Scotland to Venice.

The following letters to Sir Joseph Hooker relate to the

appointment of the Rev. G. Henslow to be Lecturer on Botany at the Hospital:—

Feb. 5th, 1866.—Can you recommend a good lecturer on botany for our School at St. Bartholomew's? It is certain (I think) that a real botanist will be elected if we can get a good one—but he ought to be somewhat skilled in speech, if that be not incompatible with learning. *Feb. 12th.*—I am very much obliged to you for your note. My colleagues Savory and Callender are disposed to think (and so am I) that Mr. Henslow would best suit our School. You know how nearly useless it is to try to teach full scientific botany to medical students; and I cannot but think that, while botany must be lectured-on in our Schools of Medicine, it may be best done by a gentleman who will endeavour to make it useful as an agreeable pursuit and as a good example of descriptive orderly science.

April 3rd.—Let me explain the difficulty in the election: my explanation will, I have no doubt, be right, though my illness prevented my having any direct knowledge of the matters. The election of Lecturers rests with a Committee of Governors of the Hospital: but they as a rule adopt the recommendation of the Medical Officers. A strong feeling existed among the Medical Officers (and the Lecturers too) in favour of Mr. Henslow, and there could have been little or no doubt of his election; but before even the recommendation could be sent-in, a communication was made to the Medical Officers and Lecturers, that some of the members of the Committee of Governors were so averse from having a clergyman for a lecturer, that it would be better not to recommend one. The announcement surprised us all: there had been no supposition that such an objection could be entertained; but it was said to be an absolute one, and felt so strongly or by so many that it would be useless to try to remove it by argument (and this I can well believe, for the Medical Officers have no opportunity of personal communication with the Committee of Governors).

Mr. Henslow being, apparently, thus excluded, the next thought was for ——: but his having never lectured seems to some of us a grave objection. You see the failure of a lecturer involves a row in the School: there is no other sign of failure than a noisy opposition—and this is horrible, especially in the summer season. The affair then stands at present thus. The Treasurer, who represents the Governors, wishes us to advertise for candidates. If any decidedly good one should

offer himself (being not a Parson—and I think I may add, not a Doctor) he will probably be elected: but unless a really good one comes, I fully believe that the objecting Governors, when they hear what he has written to the Treasurer, will give way and elect Mr. Henslow. Excuse this long story, my dear Hooker. I am very sorry for the difficulty, and am anxious to make it clear that no one is much, if at all, to blame for it. (Even the Governors may have better grounds for their opinion than I know of.)

1867.

This year, he attended H.R.H. the Princess of Wales during a long illness; and in August and September was in attendance on Her Royal Highness at Wiesbaden. In October, he was appointed Serjeant Surgeon Extraordinary to Her Majesty Queen Victoria.

He writes from Wiesbaden to his brother:—

1*a Sonnenberger Strasse, Aug. 26th.*—The place is pretty enough; and our lodgings are good; and we have all comforts about us; but a vivid delight of any kind is not within reach. I study cases here in a superficial sort of way; and am adding to my belief, long entertained, that the reputation of such a place as this depends on an occasional striking recovery which everybody talks about: that the great majority of those who come for cure leave as they came. There are crowds here who have nothing to cure but what might be cured by moderate self-denial, or borne with moderate patience. But they like the place and the gossip, and the idleness that they need not apologise for, and the occasions of making acquaintance with those who would not know them in England. I hope to make some excursions to neighbouring places, Frankfurt, Treves, Mayence, &c.: but the heat is great, and the whole atmosphere and habits of the place are extremely enervating. Every healthy person feels this; and I do not escape the influence: but with custom I hope to become more vigorous. I hope you will be able to dine at the Hospital dinner on the 1st of October, and make a speech there: I shall be in the chair. *Sept. 20th.*—I should be ashamed to speak ill of my own holiday, for I have enjoyed much of it, especially the excursions that we have made, and the shorter runs to places on the Rhine. All these have given us charming days, and many of them have given me knowledge that I may make good use of. But the best day we have had was on Wednesday, when I went to Frankfurt to

a meeting of the 'Association of Doctors and Nature-Observers.' More than 600 were there: and, in the evening, more than 400 dined together. We had the seats of honour on each side of the President, Dr. Spiess of Frankfurt: and were beyond description amused with the regular German 'festive dinner'; with the speeches and songs between the courses; songs by the whole 400 of us; uproarious 'hochs'; clinking of glasses; and at last such an excitement and such outcries of patriotism and fun as I could not have imagined from 400 *savants*. I sat next to Prof. Listing of Göttingen, a friend of Prof. Miller's; a most agreeable man and pleasant fellow-singer.

In his Memoirs, he says nothing of the many services that he was privileged to render to the Royal Family. At the time of his death, he had been for 41 years a member of the household of Her Majesty Queen Victoria, and for 36 years a member of the household of H.R.H. the Prince of Wales: a very old and very dear servant and friend. He loved to be in his place at the Court, and to be welcome there both for his own sake and for his long record of services. In a letter to his brother, he defines his loyalty as wholly personal and non-political: but it was so far political, in the original meaning of the word, that it was in keeping with that spirit in him which has been described, in a very different context, as *this spirit of order, this hearty acceptance of a place in a society, this proud submission which no more desires to rise above its place than it will consent to fall below it.* Wherever he went, he liked to be taken as a surgeon: and if he had chosen any other profession, he would have upheld, with the same steady insistence, the dignity of work and of the professional life, as the thing that places a man.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY.

III

1 *HAREWOOD PLACE, HANOVER SQUARE.* 1868–1871.

In 1868, for the first time, we had our summer-holiday all together: it was the beginning of a long line of memorable holidays with him. Ballater in 1868, Wildbad in the Black Forest in 1869—these places were decided by his attendance on members of the Royal Family. In 1870, the war between France and Germany made it impossible to manœuvre with a large family in either country; and he took his holiday at Penmaenmawr. In 1871, Lucerne; in 1872, the Lake of Geneva; in later years, the Dolomite Alps, and Italy, and England, and Italy again. Year after year, he planned the whole tour, and bore with infinite kindness the trouble that it gave him. Now and again, friends went with us; and they, and we, and the servants who were of the party, made a very imposing array of travellers: all told, we numbered ten, eleven, or thirteen; and, in 1872, eighteen. We invaded the Continent, even Italy, like an army, with the usual difficulties of transport; they called us, at the Douane, *toute la caravane*; and he was congratulated, with irony—*Mais, monsieur, vous avez une jolie famille.* His gentleness and care for every one of the party are past all telling: and he seemed always happy, always keen to see new places, churches, galleries, ruins, everything; but loving, best of all, days of long walks and open-air meals in Switzerland or the Dolomite country.

He made it a rule for his sons, that the holiday should also be a reading-party; except those holidays that were spent in going from place to place. There was reading all the morning, with one day a week off; and again in the evening, according to age and advancement in learning: law, divinity, logic, Greek and Latin—four or five or six hours a day. He too worked all the morning, usually at a table in the open air, writing letters or lectures. In the

afternoon, a long expedition all together; and in the evening, the reading again, and music.

But there were times that were holidays indeed, day after day in the open country, walking or driving; and we used to do our twenty miles a day, all together, and mostly on the high-road. At the halt for *mittagsessen*, the young men of the party would bathe, if they got a decent chance: and when evening came we would still be walking, even singing part-songs, as we tramped the last miles between us and *abendsessen*, or shortening the way by some interminable argument. He delighted in these long walks, and in the food taken in pic-nic fashion, or at wayside inns: and, if the food were rough, he would say, 'This is holiday-time: it doesn't matter if it does make me ill'; or, 'If I can't digest it, I'd better eat it till I can.' At home, he had a different saying, when he was late and very tired at dinner—'Oh! the blessing of good food and wine'—which he used to say very gravely, like his grace at meals—(and he would even say grace over his medicine). But, on his holidays, he took pleasure in rough fare, and curiosities of local cookery, and made experiments on himself with them: and in Scotland, in 1868, he tried many kinds of fungi that were 'edible.'

He loved all sight-seeing; his enjoyment of a new town was as eager, till he was nearly seventy years old, as his enjoyment of the country. Perhaps he preferred, on the whole, the Simplon Pass, or San Martino, or the road from Landro to Pieve di Cadore: but he got hardly less happiness from pictures, churches, and 'town-scenery'; and he loved an open-air concert, or a good play—from the little theatre in the park at Wildbad, which mostly gave Offenbach, up to 'Hernani' and 'Ruy Blas' and 'Rabagas' at the Théâtre Français. There was no air of duty, or of 'doing' the sights of a place: he was busy and happy, all day long, gratifying his sense of admiration after its long inhibition in London. Even in London, and in his later years, he kept up his habit of sight-seeing: he would go to see old City churches; or would walk, on winter evenings, through the shabbiest streets, to see the picturesque effect of lighted fish-stalls and fruit-stalls: he describes, in one of his letters, 'the strange mingling of fog, and brilliant flaring gas, and the colours of fruit and fish and bright metal.' Flowers and fruit, stacked on barrows, or piled-up in

cheap shops, gave him a twofold pleasure, by their beauty, and by 'the blessing that such luxuries should be within the reach of the very poorest.' [1]

But the sights of London were only a makeshift: it was on his holidays that his love of beauty got its full fling. In his Memoirs, he attributes this love to the influences of his old home. However that may be, the home-art of Yarmouth was, in many ways, feeble: it could not do more than make a bare beginning. He became, of himself, an excellent judge of music and of painting, one who enjoyed with his whole heart Bach, Leo, and Purcell, and could 'tell a picture' with great skill. But, in Munich or Venice or Florence, he never seemed to be after self-improvement; he was only satisfying a half-starved sense that he had not let himself indulge during work-time. And, if his holiday had to be in some rather dull part of England—not to please himself, but for the health or convenience of somebody else—he would still discover things to be seen, or would invent them; and, by force of will and imagination, would try to find the charm of Italy in an English village.

The holiday-reading was lightened by the help of Mr. Gilkes, the present Head Master of Dulwich College; who has written the following account, looking back over a thirty years' friendship, that began with the holiday at Wildbad in 1869:—

A biography is likely always to give an incomplete picture of the man who is its subject. It mentions what he said and did, his companions and his relations with them, but not what he wished to do or say, or nearly did or said, and thus perhaps two-thirds of his nature does not appear in it at all; only that appears which he thought it right or best to do. Thus, though much may be gathered from a biography as to the strength of a man's will, or as to his higher nature, or his sagacity, yet the man, as for instance Shakespeare would have shown him, is not there. This defect, which will always be noticed, until men like Shakespeare become more common, or until the

[1] He delighted in flowers, and laughed at Mr. Ruskin's saying, that great men do not care for them. In more than one of his letters to his wife, he tells her the names of the flowers on his writing-table: thus, in June 1864, he writes, 'I am sitting in a luxury of flowers—two grand flowers of cactus glowing to the sight, and some stephanotis and orange-blossom yet more charming to the scent—fern-leaves and gloxinia making-up the bouquet. Even you might envy me.'

minds of men become stronger, will always be a little removed by an account of a man as he was when taking his holiday; for then at all events some, though by no means all, of the trammels of life are removed. And as to Sir James Paget in particular, no biography would be complete without some account of times in which he took so thorough and joyous a delight. Every one who joined at any time in one of these holiday parties—scattered far apart are these holiday-makers now, and many are gone from this world—would probably give just this same account of them.

Of course, in the first place, he had earned his holiday; and brought to it a consciousness of work done, a mind and a body which needed change and recreation, and were capable of other works than those performed by them during the rest of the year. Thus he found pleasure in the simple relaxation from routine, and from the restrictions of city life. He delighted also in the bodily exercise that a holiday made possible; he was very fond of walking, and was not easily tired; he liked to walk for 15 or 20 miles, taking tea perhaps, with his family, at some country inn on the road, where all that he needed was hot water, something like tea, though the more like it the better he liked it, a little bread and butter, and cleanness and civility. If there was a rose in bloom in the garden, or a cluster of wall-flowers, his pleasure was perceptibly increased; and if there was any story of some experience that his host or his hostess had to tell, it was likely that he would be a pleased and interested listener. There were in fact very few things that he did not seem pleased to do. It might be to sleep out on the top of a high hill, wrapped in a plaid, to see the sun rise; to ride up a hillside in a quarry tram, to see a stone leap down the mountain-side, or to laugh at the very boyish wit of his ordinary company—nothing seemed to come amiss to him. But perhaps the chief sources of his pleasure were beyond all this: and first may be mentioned the enjoyment of life in the company of his family, which he then experienced in a full measure. No one could see the holiday party even for a short time and not notice the enjoyment; and the more any one saw of the party, the plainer the enjoyment became. Sir James indeed took a proper pleasure, as anyone not insensible to courtesy must, in the attention paid to him wherever he went by those whose attention was very well worth having; but his heart was always at home, and with his family, his wife and his children; their company was his chief desire, and the promotion of their welfare his chief object: friends he had by

the score, the whole world, it appeared, that knew him: the door of every house seemed to open readily to invite him to enter: but if his own family wanted anything, his service was for them, their voices were the sweetest for him, their lives his most pleasant object of contemplation, and their friends the objects of his kindliest regard. And secondly may be mentioned the power which he had, in an extraordinary degree, of appreciating the beauty of everything that is really beautiful in appearance or in sound, without regard either to its rarity or its cost or its reputation. A stone need not be a diamond, a flower need not be an orchid, a view need not be renowned through Europe, to receive attention from him. All things seemed to have for him their own beauty, the beauty that God has given them, and to receive from him the attention that, in many cases, God gives them more often than man. A leaf, a flower, a hedgerow, a bird's song, a gleam of light, a common man's tale—things such as every one may see and every one may hear without paying a penny, seemed to possess for him an attraction which made him really joyous. In this respect he was sometimes a great wonder, and sometimes a great teacher, to his company. Of course he felt to the full the power of the greater shows of nature and of art, the mountain, the glacier, the orchestra, and the palace; but his delight in these did not in any degree put him out of love with the beauties of the rest; just as, though he had an abundance of great friends of all kinds, yet he never for them neglected any or failed to respect any that were more humble in position or of meaner intellect. Last of all may be mentioned his strong religious feeling, the exercise of which seemed to give him a deep and true happiness, and to contribute largely to his sense of strength and security. 'Why,' said he once, 'should I go to hear *him* preach? I want to believe not less, but more.' And in his holiday his faith seemed to be stimulated by everything that he saw, by all his thoughts, and all his actions. In the rest of his life he was busy, earnestly and cheerfully, with the beneficent work which it was his duty to do, and which few or none could do as he could do it; but in his holidays he had fuller leisure to seek the company of Him who set it.

1868–1869.

In August, 1868 he was President of the Section of Surgery at the Oxford meeting of the British Medical Association; and, on August 5th, the honorary degree of

D.C.L. of Oxford was given to him, Sir Charles Locock, Sir William Jenner, Dr. Haughton, Sir William Gull, Sir John Simon, and Mr. Syme. The day before, Aug. 4th, he and Mr. Syme had been awarded the honorary degree of M.D. of the University of Bonn, *ad semisæcularia sacra Universitatis nostræ Rhenanæ concelebranda.* It is worthy of note, that his Bonn diploma puts his work in pathology before his work in surgery—*Qui et physiologiæ pathologicæ multa et ante non cognita imprimis ad naturam neoplasmatum pertinentia aperuit et de arte chirurgicâ egregie meruit.* His holiday, after Oxford, was at Ballater near Balmoral, that he might be near H.R.H. the late Duke of Albany: afterward, he stayed at Dunrobin Castle; and went, with H.R.H. the Prince of Wales and others of the party, to a drive of deer. He went as an observer only, for he never cared for any kind of sport; he writes to his wife—

Dunrobin Castle, Sept. 21*st*, 1868.—To-day, I have had my first experience of driving deer. . . . The day's sport resulted in the death of one poor stag. At its end, we most of us walked home—wet, dirty, shabby-looking fellows, tired and happy and very content to have spent more than six hours in the open air, without the least regard to what is commonly looked-to for ease or comfort. And thus has ended my first, and very probably my last, day's sport in pursuit of deer. Tedious and dull enough it must seem to you to have been: yet I would not have missed it for much money: for there was real pleasure in watching: and I wanted to know what the kind of thing is, and I am satisfied as to the real good of such pursuits to such men as I was with. Patience, good-temper, self-denial, endurance, carelessness of selfish ease, may be cultivated in a higher degree than is possible in any of the studies at home to which such men could give themselves. And I strengthened myself in my opinion about the justifiable cruelty to animals which is practised by real sportsmen.

(He never shot, all his life; unless it were in his boyhood at Yarmouth: and he never saw any match or race of any importance. It is recorded that he fished, more than fifty years ago; and was content to lie by the pond, reading Wordsworth, while he watched his float; and, when the fish was killed, opened it with his pen-knife to see whether it showed *post-mortem* digestion of the

stomach. He did not take any interest in his horses; and vexed his good coachmen, Sam Allen and Walter Allen, by his indifference. He had a liking for dogs that deserved it; he writes, in 1872, 'Amy's dogs, whom we saw yesterday, fully justified her praises. They are a pair of the biggest, gentlest, and most beautiful mastiffs I ever saw, dangerous by mere bulk and carelessness; they are, in their kind, perfect': he admired, also, a beautiful Russian wolf-hound, that was given to him by H.R.H the Princess of Wales. But, on the whole, he did not care for animals. Once, when a patient offered him his choice between a monkey, a parrot, and a black boy, he politely accepted the parrot, as the least evil. He kindly endured various animals at Harewood Place; but was not very sorry when they died.)

In April 1869, he was appointed a member of the Royal Sanitary Commission. His summer-holiday this year was at Wildbad, in attendance on H.R.H. the Princess of Wales; he writes to George Paget:—

Hotel Klumpp, Aug. 25th, 1869.—Let me tell you something of our holiday to this time. We came by way of Brussels and Frankfurt, and slept at both. They were good enough towns to charm young travellers, and good resting-places for so large a party as we had—eleven: *Mais, monsieur, êtes-vous onze ! !* as a Belgian railway-official said to me. We arrived safe, having spent much money and patience: but very happy.

It would be hard to find a better place than this for a quiet family-holiday: a little town, set in a valley among grand forest-covered hills, with a river running through its middle, fast and noisy and clear: with quiet, civil, simple-minded people: very beautiful scenery all round: good hotels and abundant good food. There is a singular likeness, in many respects, between the scenery about Wildbad and that by Ballater, where we were last year: narrow valleys between hills of about 1,000 feet high covered with pines: and rapid streams with low wooded banks: and small quantities of level meadow-land. The air too is like the Scotch: but milder and generally rather warmer: and, as in Scotland, there is now and then a dead-set of heavy rain and cold wind.

We pass our time (between meals) chiefly in working and walking. Two (and sometimes three) of the boys read with Gilkes for 5 or 6 hours a day: I do very little—but I can walk, as I did yesterday, more than 20 miles in the day, and take a

cold 'tub' in the river in the morning. Acland is here, with his daughter; and we talk over many medical matters. And Lord Carnarvon, who left this morning, was often with us. He had a chief part in carrying the Medical Act through the House of Lords, and would willingly do good work for our profession. I often think, perhaps uselessly, whether I could help you in your Medical Council work; but I can see no clear way, and must leave it to you to tell me when and how you think I can.

Last week, being asked to go and see Prince —— at Baden-Baden, I took the three eldest with me and spent a day there, and saw a wider and more complete reign of folly, fashion, extravagance, and vice than I ever saw before, or than, I suppose, can be seen anywhere in the world. The gaming-tables were crowded and the stakes were often very high: the women were dressed at the highest cost: the men looked like fools or rogues; the defiance of virtue was complete. And all this in one of the loveliest scenes in the Black Forest. The actors were chiefly French and American: very few were English. This place is in the happiest contrast: we have no society, no fashion, no dress, no restraints from anything harmless, and no appearance of evil.

In October 1869, as President of the Clinical Society of London, he gave the customary address at the first meeting of the session: and took for his subject the value of purely clinical work, and its absolute right to be called a science:—

I am anxious to urge that all our work should be really clinical; all our chief studies, among the living . . . I think there are, even among ourselves, signs of a want of faith in the power of clinical research; signs of too great readiness to reject results and suggestions which are not accordant with our belief in physiology or anatomical pathology; of too great readiness to accept and act upon deductions from any other sciences, though they are not approved by our own. I believe that we shall do little good if we do this. Our works will correspond with our faith, and be like it, timid and fruitless. We must believe, and act on the belief, that clinical science is as self-sufficient as any other. Self-sufficient indeed no one science can be. All sciences are bound together by common facts, and mutual illustrations, and the same cardinal rules of study; yet each, having its own subject-matter, may claim a special range

of knowledge, and, within this range, the highest right of judging what is true. This claim we must maintain for clinical science, and justify by the results of our work. . . . After having spent nearly equal periods of study, first in physiology and morbid anatomy, and then in practical medicine and surgery, I feel sure that clinical science has as good a claim to the name and rights and self-subsistence of a science as any other department of biology; and that in it are the safest and best means of increasing the knowledge of diseases and their treatment.

We need not, and we cannot, doubt that in time physiology and an exact pathology will have so far advanced, that the treatment of many diseases may be safely deduced from them. But that time must be very far distant; and it is not unlikely that we may sooner arrive at larger results by clinical induction. Meantime, seeing that men's lives are committed to our charge, we must do our best in the most direct way we can; we must not wait for others' help; we must help ourselves with the means that are even now at hand; and these are the means of clinical study. . . . Receiving thankfully all the help that physiology or chemistry or any other sciences more advanced than our own can give us, and pursuing all our studies with the precision and circumspection that we may best learn from them, let us still hold that, within our range of study, that alone is true which is proved clinically, and that which is clinically proved needs no other evidence.

In the St. Bartholomew's Hospital Reports for this year (1869), he published a short essay on 'What becomes of Medical Students.' With the help of Mr. Callender and Sir Thomas Smith, he had traced the careers of a thousand of his old pupils, up to fifteen years after entering the School. The essay is only five pages long: but it was very hard work for him and his colleagues. Of the thousand men,

23 achieved distinguished success.
66 „ considerable success.
507 „ fair success.
124 „ very limited success.
56 failed entirely.
96 left the profession.
87 died within twelve years of practice.
41 died during pupilage.

Among the 41 students who died, 4 died of fever caught in the Hospital. Of the 87 who died in practice, 21 died 'of diseases incurred in their duties.'

At the end of the essay, he says, as he always said, that a man is, in practice, what he was as a student:—

Nothing appears more certain than that the personal character, the very nature, the will, of each student has far greater force in determining his career than any helps or hindrances whatever. All my recollections would lead me to tell that every student may draw from his daily life a very likely forecast of his life in practice; for it will depend on himself a hundredfold more than on circumstances. The time and the place, the work to be done, and its responsibilities, will change; but the man will be the same, except in so far as he may change himself.

He writes this year to Sir Henry Acland of Sir William Gull's election to the Royal Society, and of Prof. Conington's death:—

1. *Jan. 2nd*, 1869.—There is, I know, a feeling in the Council that a successful physician or surgeon gets his full reward in his success: and that his success is not only no proof of his being a scientific man, but rather evidence against his being so. I need not tell you what nonsense this is. Gull has done more thoroughly scientific work, and does still, in his study and practice, and shows in all a more scientific tone and power of mind, than a large majority of those who have been elected into the Royal Society as anatomists or physiologists. I think we had better take the occasion to speak plainly of this. A few months' work in some narrow field of anatomy seems to be more esteemed in the Society than half a life's work in the scientific study and practice of medicine.

2. *Oct. 21st*, 1869.—I am on my way home from a sad visit to Boston, where I have left Prof. Conington apparently dying quickly. He has that singular disease, malignant carbuncle (so-called) of the lower lip. He began to be ill on Saturday, and began to die yesterday. . . . He is the last son of his mother, who is a widow, blind and nearly deaf, and past 80. It would have been nearly the saddest sight I have ever seen, but for his calmness and resignation.

Another letter, of a very different sort, is to the author of a 'popular work on Curative Electricity'; who had

offered him, in confidence, a handsome commission on any patients he would send to him for treatment. He sent this offer straight to be published in the 'Lancet,' with his own reply to it:—

Sir,—You have sent me a letter offering, as you say, an inducement to me to send patients to you. You express the hope that I shall consider the communication confidential; but I take leave to tell you that you have no right to insult me and expect me to say nothing about it. You say that you can confidently refer to me in respect of patients whom you have attended. I recommend you not to do so. I have no recollection of any case in which you did the least good.

1870.

In 1870, he published, with Sir William Turner's help again, the third edition of the Lectures on Surgical Pathology. He writes to Messrs. Longman, 'I send you a note from Prof. Turner, declaring the conclusion of our work at the new edition of my lectures. I greatly doubt whether the old bottles will hold any more new wine; and am thinking of proposing to you, in place of these lectures, a volume of Clinical Lectures on various subjects.' His summer holiday was at Penmaenmawr; he writes to his brother:—

Our life is a fair mixture of play and work. I bathe every morning before breakfast: work till early dinner: walk till tea-time, and again later: and am early in bed. The boys all work: the elder more, the younger less, than I: and once a week we make a whole holiday for a long excursion. From the little hill close by, you may have always one of the most beautiful views within miles. As I lay on the hill this afternoon and evening, it seemed to me one of the most pleasant places in the world for resting on, and thinking either of great things or nothings. On the whole, I think Penmaenmawr the most charming sea-side place I have yet seen. The union of sea-scenery and of all variety of mountain-views is incomparable. The hill behind your house has been on fire with the scarlet of the bilberry-leaves.

He writes in the autumn, to one of his daughters:—

1. I have spent the week in routine—much of to-day in walking—and I tried to enjoy the crossing of Hyde Park the

more because of some likeness of its wet grass and puddles to those of which one was reckless in our Vacation-walks. What happy hours they were! in their contrast of carelessness with the care of mind with which, here, one goes from one responsibility to another, and always with the thought that, while meaning to do good, one may, through imperfect knowledge or oversight, do harm.

2. I went to Dover last evening, to see a young officer—and found an invitation from the Colonel and officers of his regiment to dine with them at Mess (which word is one surely with deteriorated meaning, when we use it for disorder and spoiled food). I had never so dined before. . . . But, I doubt—while I still feel immensely obliged to the officers, and am happy and much comforted by this completely digested good dinner—I doubt whether such habits conduce to good sense: and I hope we shall always be content with our few courses, and then to work. I am travelling before dawn, and in a slow Parliamentary train; and one ought not to think ill of such trains, seeing the facility of writing legibly in them.

1871.

In February, 1871, he had the worst of all his illnesses—a terrible attack of blood-poisoning from infection at a *post-mortem* examination.[1] He was moved to the Queen's Hotel, Norwood, that he might have the help of fresh air in his fight for his life; and was nursed by his wife and his elder daughter, and by Mrs. Jones Sister Kenton); who had been Sister of one his wards at the Hospital, and in 1871 was in the service of H.R.H. the Princess of Wales, who sent her to nurse him, and came herself to Norwood to have news of him. He was at one

[1] He did not cut his finger during the examination; the poison got in through some weak place in his skin. He made the examination with Mr. J. A. Bloxam, then Surgical Registrar at the Hospital, afterward his assistant in private practice, and Mr. Young, his House-surgeon. Mr. Bloxam, also, was poisoned during it, and was for many weeks very dangerously ill. Mr. Young did cut his finger at the examination, but no harm came of it: he writes, 'With his usual consideration and thought for others, Sir James insisted upon my stopping—"You wash your hand well in hot water, Young, and suck your finger vigorously, and I will go on with the *post-mortem*." We could not persuade him against his will—"No," he said, "I am like an old war-horse who pricks up his ears when he hears the trumpet: it reminds me of old times when I spent many hours in this place."' It is worth noting, that one of his nurses, and Mr. Bloxam's nurse, both of them suffered from accidental infection of the hand, during the work of nursing.

time so near dying that his children were sent for to take leave of him. In this, as in his other illnesses, he was miserably depressed; he made things worse by watching his own case; and he even 'lost his nerve' once, and spoke vehemently of those who were attending him. On the day when things were at their worst, and he knew that he might be dying, he desired a consultation of Sir Thomas Watson, Sir William Jenner, Sir William Savory, Sir Thomas Smith, Dr. Andrew, and Dr. Gee. Sir William Jenner, whom Her Majesty Queen Victoria had wished to attend him, was prevented from being present. After the consultation, he asked that Sir Thomas Watson should come back to him—*And what am I to say to myself?* he asked him. It was decided at this consultation, on the suggestion of Sir Thomas Smith and Dr. Gee, to make certain changes in the treatment; and from this time he began to gain ground. On April 7th, he was able to write to George Paget:—

It seems an age since you were here, kindly helping me. Yet it is only a fortnight. The first days after that terrible Thursday-Friday passed very slowly; for though I had the great comfort of feeling myself recovering, yet one's senses seemed blunted, and I was too ill to 'pass the time' in any way. I daresay you heard of the almost sudden change in my condition which came at some time on the Friday. I was scarcely conscious of a change, and was startled and almost overwhelmed with thankful happiness when Savory told me that my pulse was only 90 and my temperature only 99. The crisis which you had spoken of seemed past: it was as if the poison had been 'flushed' out of me. Since then, thank God, all has gone on well without a check. I sleep and eat well, and drink very moderately; indeed, I drank so much when I was ill that I can now take nothing more than mild ale, and a glass or at most two of hock. Even your admirable Madeira was too strong for me: I am half-disposed to ask you to let me return the rest, for it is too good for pleasure-drink, and I hope not to want it for sickness. Burrows is very urgent that I should go to the sea. I have no great faith in it, but yield to his advice: I feel as if I could get strength in any good air—but oh! what will ever make my blood more imperturbable I know no more than if I had never been ill.

When he got back to work, he gave a clinical lecture

at the Hospital on dissection-wounds, and on his own case. He begins it with a statement of the chief clinical facts of immunity, and of the way in which a man may become proof against certain poisons, and afterward, by going a long time without being poisoned, may lose this immunity and become again susceptible to them :—

My case is evidence of this. Years ago, no virus of a dead body could hurt me; but then came a time in which I made few or no examinations after death. I stood by and watched others making them; and I became again susceptible to poisons that were once innocuous. My blood and textures regained the state they had before ever virus was introduced into them, and I became again more poisonable. . . .

Now let me tell you, with commentaries, what the virus did in me. The examination was made on February 4th, and after it I finished a long day's work, feeling unharmed. On the 5th, which was a Sunday, I felt not ill, but tired, and I spent the greater part of the day idly, falling asleep over good books. On the 6th, I lectured, in the morning, on the morbid structures obtained from the examination; and the theatre was, as usual on Mondays in the winter, very cold. I was chilled and very tired; but a heavy day's work had to be done, and I did it. At half-past eight, when I got home, I was cold and ill; the mischief had begun. . . . You will find, in every day's practice, that fatigue has a larger share in the promotion or permission of disease than any other single casual condition you can name.

He describes all the events of his illness; the removal to Norwood, the medical and surgical treatment, especially the value of quinine; and the blessing of morphia, 'whether in bringing sleep, or in changing the unrest that always increased towards night into a happy and complacent wakefulness almost as refreshing as sleep': and he ends his lecture by saying—

Sir William Lawrence used to say that he had not known anyone recover on whose case more than seven had consulted. Our art has improved. I had the happiness of being attended by ten; Sir Thomas Watson, Sir George Burrows, Sir William Jenner, Sir William Gull, Dr. Andrew, Mr. Cæsar Hawkins, Dr. Gee, Mr. Savory, Mr. Thomas Smith, and Mr. Karkeek. In this multitude of counsellors was safety. The gratitude I

owe to them is more than I can tell—more than all the evidences of my esteem can ever prove.

In May, he submitted himself to the need of taking more care of himself, and resigned his work at the Hospital. He was at this time fifty-seven years old: it was twenty-eight years after his appointment to be Lecturer on Physiology and Warden of the College, and twenty-eight years before his death. At a General Court, held at the Hospital on July 4th, he received the thanks of the President, H.R.H. the Prince of Wales; and was afterward appointed Consulting Surgeon. He had done more than can be told, in these twenty-eight years, for the Hospital. He had never ceased working for it: and the present greatness of the School is due, in a very high degree, to him. He brought to it not only his love of work, but also a mind free from envy, hatred, malice, and all uncharitableness, and a determination not to quarrel with anybody, to 'think of things, to the exclusion of persons,' to make his work his one claim on the Hospital, and to be paid in more work. But, if he had brought no more than this, he would not have obtained his profound influence over the students. He had other gifts, that kept him from being hard or formidable—light-hearted enjoyment of small pleasures, blank indifference to small hardships, infinite courtesy, love of home-life and of hospitality, generosity with his money, and a chivalrous disregard of his health. It was this union in him of an austere will with an emotional temperament that drew younger men to him. He was, indeed, more emotional than men knew. If this account of his life is to have any real value, it must record that aspect of his nature which he seldom showed to the world. Everybody remembers him as a great surgeon and pathologist, an eloquent speaker, a man of science, strong-willed and reticent. But those who were always with him saw the wonder of the sensitive side of his nature: his keen enjoyment of a good laugh or a day's holiday, his love of music, his miserable depression in illness, his life of prayer, and many acts of charity; and how he would break-down, sometimes, over words that touched him; and how, on rare occasions, he would flare-up over something brutal or imbecile said or done. The beauty of his spiritual life came just of this working together of the

will and the incalculable emotions in him; and it was for his whole nature, not for his strong will alone, that the students almost worshipped him.

Mr. Adam Young, the last of his House-surgeons, writes:—

The Millais portrait is a telling likeness of what he was in those days; but I think it shows signs of the dreadful illness he had just passed through; and there is a sadness in the expression which I don't recollect was usual with him; for he was about to give up his work at the Hospital, to which he was so passionately devoted, and all who were intimately acquainted with him know what a grief and trouble this was to him. I do not recollect his ever allowing his private work to interfere with his keeping his appointments at the Hospital: I know on many occasions he had infinite trouble in doing so. We always looked forward to his visits on Sundays; we had him all to ourselves then, and I well remember with what delight we used to listen to him as he talked to us, generally standing in front of the Ward fire.

He expected us to take the greatest pains with all the details of our work, and he held the House-surgeon personally responsible for the state of the Wards and the condition of the patients. He used to preach to us, on all and every occasion, the importance of absolute, painstaking, cleanliness in the treatment of surgical injuries; and, of as much importance, the gentle handling of wounds. Another point he was most particular about, was the comfortable placing of injured limbs; and he encouraged in every way the invention and contriving of appliances to this end. I believe plaster of Paris was first used in his wards: at least I remember when I was a dresser, on one occasion when the Prince and Princess of Wales were going round the wards with him, he drew attention to a plaster of Paris bandage I had made, as quite a new thing.

Mr. Fairbank, of Windsor, writes:—

I was one of the last four dressers he had, and Adam Young was the House-surgeon. I was one of the fortunate ones to hear his last course of lectures on Surgery; not a student ever missed them: he never had a note, and was never at a loss for a word, and every word he said was sweet to listen to. One day, Millais came into the theatre to sketch Paget as he lectured, and sat near me, and exactly opposite

the lecturer: Paget was perfectly unconcerned, although he knew he was there: it made not the slightest difference.

His tenderness to the patients was a lesson to us all: when he had to say an unpleasant thing to a patient, his gentle sympathetic manner took out much of the sting and sorrow. If he had a poor patient leaving the Hospital, who was in want, I have seen Paget go back, after we were supposed to have gone away, and give him a handful of silver, never troubling to see how much there was.

At this time also, on May 23rd, 1871, he resigned the office of Surgeon to Christ's Hospital, which he had held since January 1862. On Nov. 29th, at a General Court, he received the thanks of the President, H.R.H. the Duke of Cambridge.

In July, the honour of a baronetcy was conferred upon him. He writes to George Paget:—

July 21st, 1871.—I had a letter from Mr. Gladstone yesterday, proposing, 'with the sanction of Her Majesty, that I should accept a Baronetcy in recognition' &c., &c. Such an event was not so unlikely, after the many similar honours conferred in one's profession, but that I had sometimes considered what, if the dignity were offered to me, I should do; and, after a thorough re-consideration of the whole matter, I accepted the proposal, with grateful thanks. I hope (indeed, I do not doubt) you will think I have done right. I am very conscious of many objections to the having a baronetcy: but I am nearly certain that the advantages to the children outweigh them—to say nothing of the pleasure to myself and my friends, and the duty to my profession, which is the better for honours of this kind.

Here, with reference to 'honours of this kind,' may be told a story of him in later years. It was said once, in a medical journal, that Sir William Jenner and Sir James Paget had 'deserved a peerage.' One of his sons, four or five years ago, asked him whether a peerage had ever been offered to him. He thought, with a rather puzzled air, for some time; and then said, 'No, I think not: no, I'm sure it wasn't: I'm sure I should have remembered anything of that kind.' It is not that he was indifferent to honours; but he never was solemn over them when they came or when they went. In 1867, when there was

some difficulty in adjusting his appointment with that of Sir William Fergusson to Her Majesty the late Queen, he said, 'If they are much longer making up their minds about it, I shall begin to wish for it.'

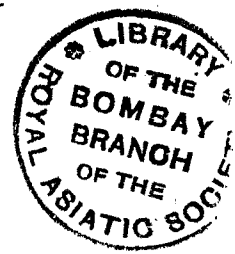
In August, he went for his holiday to Lucerne; and in September, to Yarmouth. He writes from Lucerne to George Paget:—

Aug. 22*nd.*—We are happily settled here: about half-a-mile from the town, in almost open country, and with all doors and windows open all day: and our view includes the whole range of mountains from Rigi to Pilatus, with the broad snow-fields of Titlis and its neighbours. It would be difficult to find a more perfect sight than we have: and with the varieties of cloud and sunshine no two hours are alike. . . . The boys work very well, and I a little: but I sleep better than ever, and I persuade myself that this is wise. I shall soon have more to do: for more than 200 letters of congratulation have been sent to Harewood Place, and I shall have them forwarded to me and answer them before returning home. I hope to be back on September 20th, and to go hard to work; for I am sure this baronetcy will suggest to many that I am retiring, or not unwilling to have less work. Nothing, you know, would be less true.

At the end of the year, when H.R.H. the Prince of Wales had typhoid fever, he was called to a consultation, on a point of surgery, with the physicians in attendance. He writes to his wife:—

Sandringham, Dec. 30*th.*—I have just time before this morning's post to thank you for your welcome letter. It seemed very long since I saw or heard of you. Thank God, I hear now only of your happiness. I am uncertain how long I may stay here. . . . The Princess is the sweetest nurse you ever saw (for you used not to look in the glass when I was ill). She would do everything if she were allowed, and all with the gentlest and most loving ways. And the Prince's patience and courtesy make me very ashamed of my recollections of my illnesses—especially the last. I have been in full view this morning of a perfectly beautiful sunrise—the tints of crimson, orange, yellow, green and grey and of many other colours were such as I had not seen since the sunrise over La Superga. *Dec.* 31*st.*—I send more good wishes for the New Year to you all; more of the same kind as I wrote last night, when I wrote

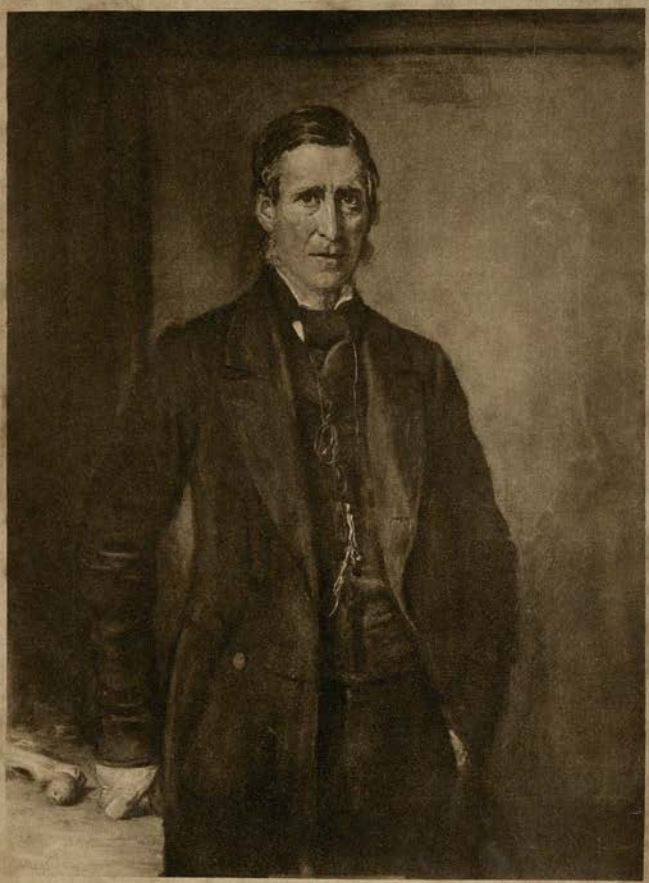
as good as I could. I would never wish more than general good, though that in the highest and best sense, for myself or any of us. Yet if I would wish any particular good, it might be for a less various year than this last has been. With a wondrous predominance of mercies, it has been so eventful as I could scarcely wish another to be. But I will not wish: I will only, with God's help, commit myself and all of us to His care. This Sunday has passed quietly. I am happier about the Prince, though not yet seeing when the end of his troubles is to be . . . . I was at Church for short service: the Prince having carefully designed that I should go. It is not indeed a beautiful Church, yet it would be hard to find a fault in it, decorated as it is for Christmas, and with many signs of the care of 'the Squire' and his wife. And the little Prince's grave, close by the Chancel entrance door, is very touching, with its white marble slab, and the Cross at its head, on which they have put the 'Suffer little children to come unto me' . . . The enclosed came to me this morning—a reasonable thing among many follies sent here, including (yesterday) a noiseless coal-scuttle to Dr. Gull, and a proposal to import mountain-air into the sick-room.



IV

1 *HAREWOOD PLACE, HANOVER SQUARE.* 1872–1876.

THE home-life at Harewood Place, all the thirty-six years without one death in the family, saw no great or sudden change; only, for most of the time, the pace quickened, and the number of things to be done was increased, till there was such a multitude of engagements at home or out, and of calls paid and repaid, as would have satisfied the most fashionable house in London. But, in spite of all the rush of a 'regular Harewood-Place day,' home-life was very simple. In the first few years, there was strict economy; my father would quote with approval the rule, 'One dish for breakfast, and two for dinner.' When there were no patients to see him, he would sometimes come up to the school-room; where he amused himself, one empty hour, by sketching Lord Harewood's coachman over the way: he wrote under the sketch, *Two hours, and still waiting for my Lady; and the doctor with no more to do than the coachman*—but my mother was careful to cut off the latter half of the sentence. In the days before he had a carriage, he often walked down to the Hospital; and had at one time the habit of reading as he walked: but he gave this up, after the knocking-down of a small child. On Sundays, carriage or no carriage, he always preferred to walk, and to take some of us with him. We remember his pointing out the barriers set outside Newgate for the public execution of the pirates of the 'Flowery Land'; and his disgust at the sight of a crowd of men and women already, on Sunday morning, waiting to see them hanged. On these visits he used to take us round his wards, but not into all of them; and used to say 'You had better not look at this,' when he came to something terrifying to children; and, if one turned faint, would send him to cool in the Sister's room, or in the Hospital Square. If



Walter L. Colls, Phot.

Sir James Paget.

1872.

his visit were in the morning, he attended the service at the Hospital church.

In the earlier years at Harewood Place, he disliked all parties, and very seldom dined out. But, at home, he carefully observed all days of remembrance, and birthdays; with the old custom of drinking healths,[1] and making little speeches; drinking always 'Your very good health' to everybody, and adding his father's toast, *All who love us, and all who hate us*—saying it very gravely; and, as years went on, saying it more and more to himself. He delighted in Christmas, and kept it in grand style; he writes to his brother, in 1866, 'I cannot yet, and I think I never shall, give up the wish for meeting, as many as possible of us, at Christmas-time.' But his care for days of remembrance went beyond the outward observance of them. Every year, he wrote, at the end of his visiting-list, the dates of his chief appointments to office, his worst illnesses, the births, marriages, and deaths in his family: and his last visiting-list, in 1895, still records the date of his father's birth in 1774.

In the evenings at home, in the earlier years, he would sometimes—but very seldom—read aloud: we remember, especially, his reading Dickens, and Wilkie Collins, and Tennyson: and how he broke down over 'Enoch Arden' and 'Guinevere': for he was easily moved to tears. Or he would show us objects under the microscope; not such as are usually shown to children to astonish them, but veritable specimens of physiology—the corpuscles of the blood, the movement of ciliated cells, the structure of bone. Or he would take part now and again in the evening-music, singing with a good tenor voice either to my mother's accompaniment, or in a duet with her.

In the later years at Harewood Place, the home-life was still kept on the old lines. Especially, all that my mother said and did was of a divine simplicity. But it is difficult to put in words her gentle and reverent life: her faith in people, her quiet contempt for gossiping or

[1] In one of his birthday letters to his brother, Dec. 22nd, 1870, he says, 'I telegraphed our good wishes at the time when, if we had happily been together, we should have been drinking healths in the happy old way. It was but a poor attempt at imitating the good custom: but the best that a distance of sixty miles would allow; and certainly such an imitation as could not have been foretold by a sane man when we began health-drinking.'

exaggerated talk, her hero-worship, her patience, her elaborate schemes for helping those who could not or would not help themselves, and for providing pleasures for those to whom she could not offer charity. She did it all with her own hands, taking food and wine to poor people, and sending off innumerable small parcels to old friends who 'liked these little attentions'; and seldom bought anything for herself, but was sorely vexed if a theatre-ticket were wasted, or a seat left unfilled at a dinner-party. She loved to write long letters to all of us, that were full of ardent admiration of everybody except herself; and she kept interminable pencil-lists of 'things to be done,' and was often over-worked. It might be said, truly, that she was faultless; certainly, it would be hard to find anyone in London more welcome than she was, wherever she went.

She said always that she was 'not clever,' and 'not able to talk well'; but all clever people liked talking to her: and in the multitude of her friends she received the confidences of all sorts and conditions of men and women. She had a passion for the country, and was always rather tired in London; but enjoyed going out to parties, and meeting great personages, because she saw how they honoured my father. She seemed to remember the romantic side of her early life, and not much of the hardship of it, beyond the misery of nursing him through his illnesses. And, in one of these, her courage had been proved: for she had raised him in bed, holding his drink in one hand, and a candle in the other, and had set fire to the bed-curtain; had laid him down, without telling him anything, and rubbed out the flames with her hands.

She was so busy, and the contrasts in the world so distressed her, that she avoided sentiment, for all her love of it; and 'never thought about thinking, or felt about feeling.' In her likes and dislikes, and in many other things, she was old-fashioned. Among books, she cared only for simple, homely stories with no problems in them, such as 'Silas Marner' and 'John Halifax': and even for books that were simple almost to childishness. Of all the many plays and operas that she heard, she best remembered Robson in 'The Porter's Knot,' Fechter in 'Belphegor,' Miss Terry in 'Olivia,' and Mario's singing in 'Le Prophète.' Her own music and, in the earlier

years, her singing, were beautiful; especially, her playing and singing of Handel. She used to play to my father every evening, while he worked; even when she was nearly eighty, and a few weeks before her death. It was delicate, old-world home-music, of a kind not often heard now. All her girlhood, she had studied hard at the Royal Academy of Music, under Mrs. Anderson, and Crivelli, and the great Dr. Crotch, writing fugues and part-songs and concerted pieces: she always remembered with pride that Dr. Crotch had copied some of her early works into 'his own book'—remembered also his crooked wig, and his habit of winking at his pupils, and his alternate roughness and mildness with the harmony-class. She won her first prize at the Academy when she was only twelve years old; and at the prize-giving they set her on the table, that so small a student might be visible. She became able to read a full orchestral score at sight; and, when she left the Academy, taught music; not without some opposition to her father's wishes. Out of this work of teaching came, directly or indirectly, her life-long friendships with Lady Bovill, Mrs. Moscheles, Lady Thompson, Sir Thomas Smith, Lord Blachford, and Sir George Grove. Among the music that she wrote, there is a fugal arrangement of the chimes of St. Sepulchre's church, near the Hospital: and one of the earliest of my father's letters to her, *Yarmouth, Jan.* 1837, says, 'I have been looking most diligently through centuries of volumes for you. The lines on Belshazzar's Feast by Byron are short iambics, and could only be set to a jingling ballad tune which it would degrade you to write: but I have found some beautiful words by Milton, that would be charmingly suited for a glee.'

Thanks to her, there was always good music to be had for the asking at Harewood Place: especially, at the old-fashioned, informal, hospitable Sunday supper, a very pleasant meal, seldom without friends, and never without music—the one idle irresponsible bit of the week, when everybody said whatever he liked. Sometimes, the music and the talk were of the utmost excellence; as when Miss Janotha, Mr. James Knowles, and Canon Scott Holland, were all there together. And sometimes, but this was a rare event, the talk ousted the music; as when Surgeon Parke came, and told his adventures in Central Africa—

one of the younger men in his profession whom my father most admired and honoured.

Throughout the week, my father's work from breakfast to dinner was like that of all busy men, save that there was rather more of it. It was the evenings that were the wonder. Breakfast was early; but he did not find fault with those who were late. He had his luncheon in his study, with my mother sitting with him; then one of us wrote his list, a scrap of paper that was put on the hall-table, that he might be found in any emergency. He usually came in about five, for tea and letters. Dinner was a very plain meal, soon over; a Spartan sort of dessert was put-out upstairs; he fetched his books and papers from his study, unlocked his desk, and set to work, at a narrow segment of the table that we all used. Two feet and a half were enough for his desk, his letters, and his glass of wine: and always, year in year out, he sat at the same point of the table's compass, and made the least possible space do for everything. He began work at once; took his wine, and his tea, while he wrote; heard and praised the music, but did not stop writing for it; at 10, read prayers, then wrote till 12, and sent his first batch of letters to the post; then wrote again, or read pathology or surgery, till one or two in the morning. Of all memories of Harewood Place, the most vivid is of him sitting at his own small share of the big round table, at his desk: and we knew the moment when he signed a letter, and the etching sound of his pen changed to a swishing sound as he wrote his name.[1] It is hard to imagine him at a different point of the table, or with his books and papers a foot out of place; and he always declared that he had plenty of room. In the earlier years, if he could not keep awake, he sometimes lay on the sofa and slept; in the later years, he fought sleep at his desk, with good success. He seldom put his work aside for a talk; only, he would sometimes take part in such speculative and controversial arguments, about things in general, as are common in families: and, if the tide of debate set toward him, even at one o'clock in the morning, he would still be alert, and very careful of his words; then, later

[1] The signature, put under Mr. Richmond's portrait of him, was written in 1891, when he was 77 years old. The specimen-page of the Memoirs was written when he was about 70.

still, he would send the rest of his letters to the post, and his day's work would be done. Talk, or a new book, would thus hold him; and once he read 'Romola' till five in the morning.

In the later years at Harewood Place, he lost much of his dislike of going into society, and on the whole, and with many exceptions, found pleasure in it; and the season's list of his engagements was of prodigious length. He had to make a rule, not to be engaged more than three nights a week; and he often went on from a dinner to one or more receptions. But always, so soon as he came home, he opened his desk and wrote hard; and never let the evening be the end of the day's work. Especially, he enjoyed his membership of Grillion's, The Club, the Literary Society, the Philosophical Club, Nobody's, and his Hospital Contemporary Club.[1] These occasional club-breakfasts and club-dinners were his chief social pleasure: but he often would not give the time, or was prevented; and did not go to more than ten or twelve in the year.

Of his long membership of Nobody's, which began in 1863, Lord Aldenham writes:—

> It is very difficult to say enough of the estimation in which he was held by his colleagues in the Club of Nobody's Friends, and his presence at our dinners whenever he was able to be with us was always a great pleasure to us all; his gentleness, courtesy, and ability making him always an acceptable and highly valued *convive*. It was necessarily impossible that I as President could speak with personal knowledge of his conduct in the chair as Vice-President; but it was always a pleasure to hear him speak. His pleasant voice, his well-chosen words, however sudden or unexpected the call upon him—never saying too much, but always saying much in few words—gave an example to all of us. No man more zealously than he maintained and enforced the leading principle of our Society, which is 'Devotion to Church and King.'

He used to say that the poverty of his early life was a 'nuisance,' which he had made the best of, and had not

[1] He did not belong to any residential club. His Hospital Club was the second of the Contemporary Clubs, and was founded in 1839: he was Secretary from 1867 to 1877: they used to dine at the 'Albion,' and play whist after dinner. When the Club came toward its natural end, the remaining members met, for a farewell dinner, at Harewood Place.

greatly disliked: he did not admire it, or hold it up as an example of virtue. Once, when one of his sons fell to praising the beauty of strict economy, he said rather angrily, 'I'm sure I work hard enough to make the money: why should you mind spending it?' And once he said, 'I should like people to be surprised, when I die, to see how little money I leave.' He called himself penny-wise and pound-foolish; he kept no accounts, and took no fees, in holiday-time; and, on pleasures for other people, he did not mind very carefully how much he spent. But, of course, he often looked upon the innumerable pleasures that he gave his sons, abroad or at home, as an investment; as a way of getting work, or of becoming fit for better work. He made a rule, in helping poor people, to give money rather than lend it. In the earlier years, he used to say to unknown applicants for help that they must bring a letter from somebody known both to themselves and to *him*; in the later years, he did not enquire carefully into the merits of the case.

Of his private practice it is impossible, for many reasons, to write freely. He maintained the strictest reserve over it; he even used a cypher, for many years, in his case-books: but a most innocent cypher, that could be read at a glance. In the years of heaviest practice, when he often had twenty or more people to see him in the morning, he was sometimes almost exhausted at the end of the time: it was work of the utmost responsibility, and must not be trifled with; one of his children once dared to 'dress up as a patient,' and was shown-in to him, but got no encouragement to do it again. His manner toward new patients was rather formal: it was an ordeal, for some of them, to consult him. He used to stand while he spoke to his patients; and was sparing of his words, but was careful to write or talk fully and precisely to the medical man who had advised or brought the patient to consult him. With those patients who talked much, he was silent: he said it was the quickest way in the end: and he was fond of trying in how few words he could write or say a thing. Once, he was challenged to a sort of contest in brevity, and accepted the challenge; his adversary was a Yorkshireman, who came into his consulting-room, and merely thrust out his lip, saying 'What's that?' 'That's cancer,' he answered. 'And what's to be done with it?' 'Cut it out.' 'What's

your fee?' 'Two guineas.' 'You must make a deal o' money at that rate.' And there the consultation ended.

He saved his words to save time, and because it amused him to save them, and not from any love of talking in oracles. To be brief was to be wise; to be epigrammatic was to be clever: and his constant word of praise was 'wise.' He once told a fanciful patient, 'Whatever you do, don't think you are an exceptionally clever young man.' His dislike of cleverness went with his contempt for proverbs: it was a saying of his, 'as false as most proverbs.' He would confute them; a bird in the hand is not worth two in the bush, because the two may be of different sexes: and a man ought not to do to-day what he will do better to-morrow, or never need do. Or he would reverse them—for instance, the old adage about sleep, *Six hours for a man, seven for a woman, eight for a fool*: six hours, he said, were enough for the fool, but the man ought to have eight. And first thoughts, he said, were best for a man, and second thoughts for a woman. But, though he laughed at proverbs, he had one or two proverbial sayings of his own; especially, *Never alter a plan once made*, and Mme. de Staël's *L'esprit humain fait progrès toujours, mais c'est progrès en spirale*, and John Hunter's advice to his pupils, *Don't think, try; be patient, be accurate.*

The general belief, that his supremacy lay more in the science than in the art of surgery, was put in an odd way by a lady who consulted him—'I understand that your specialty is diagnosis.' It was more roughly expressed, at one time, in a saying that you ought to go to Paget to find out what was the matter with you, and then go to Fergusson to have it removed. His highest excellence was not in operating, but in his calculation of all the complex forces at work on a patient—heredity, temperament, habits, previous illnesses; in his insight into the variations and abnormalities of disease; and in his pathological knowledge of the characters, tendencies, and developments of surgical diseases. Thus, at St. Bartholomew's Hospital, there is at least one great practical improvement in operative surgery associated with his name—the removal of myeloid sarcoma by enucleation of the tumour instead of amputation of the limb; and he worked this out, with Sir Thomas Smith,

not so much from the point of view of surgery as from that of pathology.

It has been said, of his private practice, that he saw and attended so many patients for nothing, or for a very small fee, that he injured the younger members of his profession, for whose sake he ought always to have charged full fees. But the remission of fees, in whole or in part, is only what thousands of medical men are always doing: and his dislike of acting differently from other men would have kept him from being even more generous than they are. Besides, his letter to his brother, Sept. 18th, 1863, shows that he was not careless in regard to fees. Certainly, he remitted a great many; not because he was unmindful of any duty to his profession, but because he was, all his life, on the side of individualism. He took no interest in any form of unionism or socialism, either in his own calling or in any other; and was content to say, of the Eight Hours Bill, 'I wonder where I should be now, if I had only worked eight hours a day.' He would have said that it was nobody's business, what fees he received or remitted. But he hated to hear that a medical man had been 'shabbily treated' by a patient; and, when a young surgeon asked him what fee he should charge to a miserly patient whose life he had saved, he wrote back, 'Ask the man, how much he thinks his life is worth.'

The cases that were sent especially to him, for a final opinion, were those of diseases of the bones and joints, and those of 'nervous mimicry' of surgical disease, and those of tumours. He often spoke with distress, or even with visible agitation, of having seen a bad case. He remembered, twenty years after it had happened, the misery of sitting through a dinner-party just after an operation where he thought he had done wrong: 'I remember how I hated having to talk to the lady next me,' he said. Three of his letters to Sir Henry Acland, in 1876, 1889, and 1890, show how keenly he felt the tragic side of practice:—

1. This is surely the saddest thing that we have known among all the sadnesses that our calling has brought us to the sight of —a very tragedy. Nothing seems wanting for the perfection of sadness, and one cannot discern, in any of this world's hopes, a gleam of consolation. May God grant peace and

comfort in the sure hope of heaven's joy. It seems very hard to be unable to stand aside for a time, and let life run by, while one might try to learn wisdom from these sorrows. But it cannot be; the work must be done, and, much worse, the pleasure must be worked out.

2. This is an unhappy day: for your case is the third in which I have been asked to help in deciding, not what is best, but what will be the least miserable.

3. One cannot speak of Lady ——'s death as a sad event, unless by limiting the thought of sadness to ourselves, for it is not possible to imagine a more blessed contrast than the contrast between her present life and that which she has left. But poor Sir ——, what will he do now? They were so mutually dependent for the quiet comfort of home life.

But on those rare occasions when it was necessary, he could be very stern with a patient who was helplessly self-willed: he would speak in a grave penetrating voice, with an angry look in his eyes. Once, at the Hospital, he stood looking thus at a patient who refused point-blank some treatment that she urgently needed; and she gave way, saying, 'Oh, Sir, only don't look at me like that, and I'll do whatever you like.'

All his patients—the innumerable multitude that admired or almost worshipped him, and the few who were rather terrified of him—all alike trusted him, knowing that he would hold their confidences sacred. And he was trusted, no less, by every member of his profession. Those who sent patients to him knew that he would never speak or think lightly of his duty toward themselves. And this belief in his honour was only a part of his profound influence on his profession. For he was consulted, not only about patients, but about ethical questions. Disputes, and charges of misconduct, and suspicions of dishonour, were brought before him as before a Court of Appeal: it will never be known, how often he sat in judgment over quarrels and scandals in the profession. Nor will it ever be known, how often his advice was taken over the appointment of men to high offices in the Court, the Universities, the Medical Schools, and the Government services.

It may be well to put here what he thought of the practice of medicine and surgery by women. The follow-

ing account, written by Mrs. Scharlieb, M.D., comes with the authority of long friendship with him :—

Sir James Paget's attitude towards the question of medical women seems to have been at first one of simple interest. He approved of the principle, but doubted how it would work practically. He knew, and warmly approved, of the action of the Government of Madras in giving medical education to women free of cost, so as to begin to provide for the intelligent care of high-caste Hindu and Gosha Mahomedan women in times of sickness. When I came home from India in 1878 I brought a letter of introduction to him, asking him to help me if possible in my desire to obtain the further qualification of the London University. He received me very kindly, and expressed great sympathy in my wish to be really well qualified to work among the women of India. He realised how difficult such work must be when the usual assistance of consultation was impossible, owing to the prejudices of Eastern peoples to the services of male practitioners in the case of well-born ladies.

I saw Sir James several times during my visit home, and always found him anxious for the success of my work. I know he did not at that time publicly advocate the cause of medical women, and I think this was because he was uncertain whether the movement would develop sufficient staying power to justify so great a departure from the existing order of things. Later on, within the last ten years of his life, he was fully convinced of the desirability of a supply of well-trained and fully qualified medical women ready to work in all parts of the Empire. He repeatedly sent kind messages to the New Hospital for Women; and would have taken the chair at one of our annual meetings, but by that time he had given up all such public duties.

1872.

In 1872, his friends presented to him the portrait that Sir John Millais painted: it is surely one of the finest of all Millais' pictures. Among those who were at the ceremony of presentation were his three old pupils, Sir George Humphry, Professor Rolleston, and Sir William Turner; from Cambridge, Oxford, and Edinburgh. The portrait was added, at his request, to those of other phy-

sicians and surgeons of St. Bartholomew's, and is now in the Great Hall of the Hospital.

He was elected, this year, an Honorary Fellow of the Royal Society of Edinburgh and a Fellow of the Linnean Society. His summer-holiday was at Prangins, Sir Thomas Lucas' beautiful villa on the Lake of Geneva. On Sept. 7th, he writes to Sir George Paget :—

We are on the very border of the lake, which is certainly for colour the most charming in Switzerland, and for variety of tint and surface at different times even more beautiful than I had supposed. . . . There is so much beauty in view, without even leaving the house, that one is only too content to sit still and be happy doing nothing. However, we have been, at times, very active : and thank God I have found myself able to walk more than I ever before did. I have done some little work (the boys a much fairer quantity), and have written some lectures on Constitutions, which I have long had in plan. But they are not fit to give—at least, not to speak ; and I think they would supply nothing useful to you : but you may have them, if anything should lead you to the subject in your lectures on the causes of diseases. I expect that we shall stay here nearly as long as we can, and then go slowly straight home, spending two days in Paris, where young people, at least, seem always able to be happy. I am glad to find myself refreshed and (so far as I can judge) fit for work again ; and I feel as if I were rather hungry for practice or any other kind of mental work.

The following letters this year, to two of his sons at Oxford, illustrate his opinion of University-life :—

1. To F. P. *Sandringham, Jan. 2nd,* 1872.—I have to thank you for your affectionate letter, and to send my good wishes in exchange for yours ; but chiefly thus to say Good-bye on your return to Oxford, and to tell you how I hope you will have all happiness and prosperity there. Your success has made me more anxious in hope than I could have thought I should be. What I feel cannot fairly be called fear or doubt of you ; but I am more anxious than I should have been, if you had not succeeded, about who are to be your competitors and what the hindrances to your work, and twenty other things which it is useless but inevitable to think of. Useless—for the end of all my thinking is, that I have full confidence in you,

and am sure that you will do your best, and that your best will be good. And so I commend you to your work, and pray for God's blessing on it. *Osborne, Feb.* 21*st.*—I should be very unhappy for you, if there were not, in the midst of all the troubles, a certain pleasure in these strifes. I can feel it for myself, in the far greater happiness of having too much than of having too little to do; so that each day brings the doubt whether all its work can be done, or whether some crash must not happen; and one lives in constant strife with hard circumstances, and generally comes out not quite defeated. God be with you and give you all his best blessings with whatever of what we call success.

2. To H. L. P. *Oct.* 13*th*, 1872.—I could envy you the hundred happy feelings that you have every day in entering on University life. I can remember the like of them, though these were far less keen and more spoiled by circumstances, when I began my student-life in London. There is a charm never afterwards quite equalled, in being for the first time sole disposer of part of one's own time, and all the furniture of one's room, and in determining the order and quantity of one's work, and in being (as nearly as ever) one's own master (a most foolish and untrue expression). I wish you all joy in having this happiness, and wish it or the like of it would last longer. But chiefly I hope you will like the University work enough to lead to your getting out of it all the great good that it may yield. Certainly there is no investment so good, in the present day, as that of hard work by a clear head in either of the Universities. It is more largely and more quickly paid for, both in money and in social position and in opportunities for influence, than anything that can be named. I should like you to have, especially, this last inducement always in mind: for it is only the truth that the good you may hereafter do for others will depend, in very great measure, on the good you may in your University-career do for yourself. God help all your strife to reach it.

But he did not believe that reading for a pass in classics, at Cambridge or Oxford, helps men either in the study or in the practice of medicine. He writes to his brother, Sept. 26th, 1870:—

All that I have seen at the Hospital has made me sure that the University course of ordinary reading, if not carried on to a high point, such as that which would get a fellowship, is of

very little value for the later study of medicine. Even you can hardly know how very ordinary practitioners the ordinary University graduates become. On the other hand, so far as I have yet seen, the natural-science students have a real advantage over others. They get a repute in subjects, some of which medical men can understand, and they save time in their medical studies, and have a quicker understanding of them.

1873-1874.

In 1873 he was elected a member of Grillion's Club, and of the Literary Society,[1] and an honorary member of the Medical Society of London. In 1874, he received the honorary degree of LL.D. of Cambridge, on the occasion of the opening of the new Cavendish Laboratory: was President of the Section of Surgery, at the Norwich meeting of the British Medical Association: and was elected an Associate of the College of Physicians of Philadelphia, and a Corresponding Member of the Academy of Medicine of New York. This year, also, he published in the St. Bartholomew's Hospital Reports his account of that disease of the breast which is called after his name. His summer-holidays these two years were in England, on account of the ill-health of H.R.H. the late Duke of Albany: but in September 1874, he went for three weeks to Belgium and Holland. His letters to his wife, during those weeks, are put here almost without abbreviation: for they are an admirable picture of him in holiday-time.

Letters to George Paget. 1873–1874.

1873.

1. *Feb. 4th.*—I received this morning from your Vice-Chancellor a very polite offer to nominate me for the Rede Lectureship this year. Of course I should, on some grounds, be very gratified in having it and in lecturing at Cambridge: but I hesitate more than ever I thought I should to accept

[1] He writes to Sir Henry Acland, June 11th, 1873—'I saw Mrs. —— yesterday, and advised a splint for her finger; and if she could be put, body and mind, in splints for 2 or 3 months, it would do her a world of good. Thanks for your vote at the Literary—*The* Club, as I hear it called. My election is an honour in social life for which I feel something better than pride; and not quite safe for me to contemplate, lest I should become content with my past life.'

such a task. So, I write for your help and guidance. My reasons against accepting are :—

That for several years I have worked at nothing but practical surgery, out of which it seems impossible to get materials for such a lecture as this should be.

That I am quite unread in any form of modern physiology or pathology, and can neither repeat nor refute what has been done.

That lecturing is now very hard work for me, having so little time for thinking or writing carefully, or for learning what I am to say. I am already very pressed in preparing some Clinical Lectures which are to be given in May and published in the Lancet.

On these grounds I am disposed, though it will be with great regret, to decline the offer: but I shall be very much obliged to you if you will, however briefly, write me your opinion. I cannot quite make up my mind to relinquish an opportunity for so rare a piece of work of the kind that I used to enjoy.

2. *June 29th.*—Are you coming to the College of Physicians' Conversazione? If so, I hope you will dine here and meet Dr. Tholozan, the Physician to the Shah, and Dr. Hirsch, the Physician to the Czarewitch—both very pleasant men. Pray come if you can. *Oct. 11th.*—Your Vice-Chancellor will shortly receive from the London University a notice of their readiness to take part in the Conjoint Scheme. A similar notice is sent to each of the co-operating authorities: and at the College of Surgeons I shall move—or get another to move—to acknowledge the notice with satisfaction, and to invite the University to nominate representatives for the Committee of reference. If you think this a right step, will you mind suggesting or moving a similar one at Cambridge? and that soon: for we cannot well begin work again till the L. U. is acting with us. *St. Leonard's, Dec. 21st (after pneumonia).*—As to what to do next—I am in my usual state after illness; weak and irresolute and drifting into work, because I hate to admit myself unwell and to annoy those who want to see me. I shall shirk all I can: and shall see no new cases till the 26th (and then there will be few or none to see). And I shall try to find some plan by which I may diminish work: at present I can think of none but such as might involve a larger loss of income than I can afford, or a loss much greater than in proportion to the leisure gained.

1874.

March 24th.—I cannot tell you how delighted I am with the proposal to give me the LL.D. of Cambridge. It is, to my mind, by far the best academical honour in Europe; that which I would have worked most for, if I had thought I had a chance of getting it. And my happiness in having it will be increased by the certainty that your repute in the University, and the esteem all have for you, have helped very greatly to bring the honour to me. I shall enter June 16th for (D.V.) a great holiday. *July 20th.*—I thank you for your kind invitation: but I cannot leave. My ordinary work would hold me tight enough till long-vacation time: and, besides, I had to go to Osborne yesterday, and may have to be for some time at hand in case I should be wanted there again. So (D.V.) I shall end this season's work, and in October, when I may be fresh again, shall think whether I may safely give-up operating. *Oct. 16th.*—I came back (from Holland) to heavy work waiting for me, and have not had five minutes' rest since I came: but the vacation seems to have sufficiently refreshed me, and I feel more nearly fit for the renewal of the Conjoint-Examination question. I see a constantly increasing dislike of the scheme in the College Council: some hating to ive-up the appointment of examiners, some being averse from all change, some disliking the association with the Apothecaries.[1] Pardon my writing more. It is very late and I want bed very bad.

Letters to his Family. 1873–1874.

1873.

1. To C. P. *Wargrave Vicarage, Aug. 30th.*—I had capital walks both Thursday and yesterday, just clearing rain-storms. On Thursday Gilkes and I went to Shottesbrook, where there is a charming little Greek-cross church, built almost entirely with well-squared flints, and in a singularly beautiful site, besides having near it the largest yew-tree I have seen, and the tomb *Peccatorum maximo.* And yesterday we went over Knowle Hill to Bonsey's hill and wood, where we found a fifty-yards-

[1] A year later, Nov. 26th, 1875, he writes, 'I wish the affair were well at an end. I believe, on the whole, that a Conjoint Scheme would be right; but the balance of my mind in favour of it is very small; I cannot be enthusiastic for it; and yet I feel sure that I wish for it nearly as much as anyone who knows anything about it. Now, for a pleasanter thing—Christmas-time. We all hope that you will spend some of it with us. Pray think of this with favourable prejudice.'

long-difficultly-traversable-branching cavern, from which, for twenty years, they have been getting chalk. The surprise made it a delight, especially to Gilkes; and the unexpected visit made the two poor chalk-diggers very happy, and for one shilling they called me 'my Lord'—cheaper than any German Barony. The wood is very pretty, and with changing tints of autumn may charm us many times. And these are all my adventures; we long to hear of your's.

2. To C. P. *Nov. 2nd.*—You may be sure that the subject most often, almost constantly in our minds, is this sad death of Sir Wm. Bovill. It seems terribly sudden, even though one knew that it was likely thus to be. We shall all feel his loss very long: for he was a thorough friend, warm-hearted, bright, delighting in the happiness of others; and one had seen him rising to distinction, and so enjoying it and diffusing his joy, that one might have thought him likely, and (if one might ever so think) worthy, to live to a great old age. God help them all: it seems impossible to imagine a sharper loss than they sustain.

All other things have gone calmly since you left: only that I have not had one quiet evening, for I have had to go every evening to see two poor old men who could not die. Thus I have had neither reading nor much writing, and only on Thursday any unusual amusement. That was at the Philosophical, where we had a pleasant dinner, and I sat between Hooker and Francis Galton. Galton tells me that some very striking facts come out of his enquiries about scientific men. One, especially, is their very high average of energy and capacity in mere business; the last thing the 'vulgar' would expect of those whom they scoff-at as 'philosophers.' He hopes to publish his results in two or three months; but they will, I expect, chiefly show the need of similar enquiries among several other groups of successful or distinguished men: for I suspect the energy is usually the fact, the scientific pursuit the accident, of the successful career.

1874.

1. To H. L. P. *Feb. 1st.*—I hope you are obeying the Vice-Chancellor's injunctions and keeping away from contested elections! Here every one is astir about them—unless myself, for, having no great choice of candidates for Westminster, I can look-on calmly. I cannot make-up a mind to choose with. Mr. W. H. Smith is sure, and will continue to represent, as a very type, the substantial prudence of the Borough: so he does

not want my vote. But as between Sir Fowell Buxton and Sir Charles Russell I can only balance evenly; the just-man of peace against the full-man of war; the Liberal in against the Liberal out. I think I should vote for Russell but for the fear of adding to the chances of D'Israeli being chief governor of the country. This seems likely, and I will not add to its likelihood; for if I can be sure of anything in political affairs it is that history will scoff at the people and the time guided by him. At home, there is little to tell of since you all left us in the blank. Business is easy; dinners are punctual; nights-rests long enough, nearly; the Dog is not visibly dying; the Parrot shrieks more; the orange-tree blooms rather drily; and we are alone, happy and mutually content.

2. To H. L. P. *May* 31*st*.—I am tired of my work and longing for holiday-time. It is hard to see these fine days, and hold on in one's routine; and to feel the delight of them spoiled by the ill-smelling London dust and air blown into one's face by what one can be sure would be sweet breezes in the open country. Such ruin of nature shakes a little my conviction that the order of society is on the whole the order of nature. But, perhaps, it is only that I am tired . . . I have no news—not even a good story from one of my (for shame) five clubs. It would be a great shame, but that in one we have only one, and in another only three, meetings in the year: and I do not attend, of the whole, more than one meeting in three.

3. To C. P. *Nov.* 8*th*.—Mary and I took a long walk this afternoon to see City-churches: but all were closed, and we had no guide to find a 'Costar' with.[1] Only one had any service, the little chapel of the Mercers' Company—where might have been a very good service, but for the introduction of a choir of four persons, with three terrific voices, who were in a pew just behind us. They sang 'everything,' including an Anthem, and made me wish myself a Quaker. Indeed, I think I must find some means of escaping from the hideous noises that are in most of our churches. But you will say that I shall think long about this: and I daresay I shall.

Letters to his Wife, from Belgium and Holland. 1874.

1. *Ghent, Sept.* 19*th*.—Our Hotel is bright with white linen on the beds and tables, and our windows look on a pretty little garden well kept in the courtyard, and good flowers are in the windows of its chief passages. You may guess that we have

[1] *Costar* is the Dutch word for a *custos* or sacristan.

all had long walks in the town, and have seen its chief beauties. The cathedral is disappointing in what is told as a glory of it—the lining of large portions of the choir and transepts with black marble: for the blackness is imperfect, some of the great marble slabs having lost their polish, and some having become in patches rough and grey, inevitably reminding one of the shabbiness of an old black suit of clothes. But the priceless treasure of the Cathedral is the great group of pictures by the van Eycks. It is really past describing, so wonderful is it in grace and dignity of forms and in the gorgeous richness of colours; I doubt whether even Raphael has painted anything so wonderful in effects, or so nearly justifying the endeavour to represent a subject so impossible of conception by a human mind.

2. *Amsterdam, Sept. 23rd.*—The road hither was across the usual band of marshes cut with canals and ditches, rich in green pasture, scarcely varied unless with cows of different spottings, or with gulls or herons—a land to read hard in while you travel. They that love sky and clouds should come here, for you never see less of them than the complete hemisphere. But Amsterdam broke-up all fatigue of sameness, with its constant variety of houses standing on each side of canals and rows of trees. Broad canals and bridges, and on every canal great barges, laden or shifting cargo, and on each side of each canal a broad quay with a row of trees, and flanked by private houses, or shops, or huge warehouses—these make up the chief part of the town—a place of active life unlike any we have ever seen; not imaginable unless by some one who can put Liverpool and Venice in one thought, and suppose the one city completely planted, and (harder to imagine) with every house clean, not one dirty window, not one window-frame, or door, or door-post that would yield more than half-a-day's dirt to the washer. You know well enough how we walked through streets, and stopped at shops, and at corners, catching picturesque points of view, and, at every best thing, wishing you were with us. Slowly we came to the picture-gallery, and found there a few marvels of art, but very few in comparison with the number of pictures. Still, one could learn in it an excellence of Rembrandt and Van Helst, and of Hobbema, such as one could only study here: and could be convinced that Jan Steen, and Ostade and some more, were at the best only vulgar clever Dutchmen. . . . And we went to the water-side of the City, if any part can be fairly so named, when water

is everywhere, inside and out: I mean to the huge docks and landing-places by which the largest ships lie. There, we took a boat and went off to a place called the Tol-huis (whence I am satisfied my Tol-ver ancestors must have had their name). It was like, with a huge difference, our excursion to the Lido . . . Dutchmen must have the remnant of the Beaver in them; but for such a nature, men must have given up the land of Holland as unfit to live on, impossible to build on.

3. *Scheveningen, Sept. 24th.*—The walk (from the Hague) is nearly 3 miles long; all pretty, well-shaded, cool and pleasant: then came the village of Scheveningen, like enough to Gorlestone set down on sand lower than the denes; then the mighty sand-bank, and then the full view of open sea. Except for the Dutch instead of English boats, we might have thought ourselves on any piece of the beach at Yarmouth far from the town: or if Frank can recall the Marrams at Caister, to which he and John and I walked, he may see Scheveningen and imagine the village set down in the hollow behind the sand-hills. The likeness is complete in form and structure and spare herbage: the old Marram-grass of my botanizing days covers both alike. But beyond the village, along a walk over the sand-hills, we soon came to the modern Scheveningen, the Dutch Brighton.

4. *Rotterdam, Sept. 25th.*—One might think the town composed rather of river and canals with ships and barges than of streets with shops and houses. The more one sees of Dutch towns, the harder does it seem to name any others in which there is so frequent a succession of views which, though they may not be of the highest order of beauty, are yet thoroughly delightful. It is enough for a day's pleasure to be always looking along and across the canals with the infinite variety of effects produced by the trees and houses at their sides. Rotterdam has no important works of fine art, but we had the good luck to hear the magnificent organ in the great Church, which some say is better than that of Haarlem. It was really very grand; clearer in sound and rather fuller, I think, than any I have heard in England. And we went up the huge Church Tower, and had an immense view of the surrounding land and water, all equally level; but the land splendidly green. One may no longer speak of England as being brightest and longest in its summer-green tints: the trees here are only just gaining their autumnal tints: many are still full green.

5. *The Hague, Sept. 27th.*—At the concert at the Zoological-Botanical gardens here, we had just such weather as you

describe—a full brilliant moon after a glowing sunset; and the scene was such as people might think impossible in Holland—dull, damp and flat as they call it, with none but heavy fat pale men, or such women-monsters as Rubens painted. The gardens, which are as pretty as well may be, and set in the middle of the park, were well lighted, not too brightly, not illuminated, nor made absurdly artificial with coloured lamps or devices; and more than a thousand people were sitting and walking about the orchestra, just after the fashion, without the flash, of Wiesbaden or Baden. The music was admirably played by a full orchestra of about 50 men, and as we stood by a little lake's side, full-lighted by the moon shining over the clustered park trees, with a group of pelicans at one side of us, and a fine stately old stork in the very fore-ground, the whole was (but for your absence) a complete delight. It was what some like to call a fairy land: but too good for that: it was such as one must feel to be a gift from the most merciful God who, though we may not believe that He has made all things for man alone, has surely so made man that he may richly enjoy them all. Trivial as the scene and the event might appear, they were enough to make one feel how utterly inadequate are one's thanks for the possession of large and varied consciousness, how incomplete the mind must be which cannot believe that there is One to be thanked for all that we can enjoy. . . . Yesterday, we started for the highest hills in Holland—they even call them the Brederode Mountains—and they are sand-hills full 250 feet above the level of the sea, not quite so high as some of the Church Towers. We had a charming walk of nearly five miles, passing through the village of Bloemendael, one of the very prettiest in Holland, with country houses and gardens which one might make light of in England, but which here, in their perfection of order, cleanliness, and good taste, are really charming. It is a shame that our own are not much better, when work and soap and water would do it. At the 'Mountain top,' which we reached after walking through half-a-mile of sand, we had a really glorious view. The sun was low in the west and we caught there glimpses of the sea brilliantly flashing, between the downs; while in all the rest of the panorama we had bright green meadow-land, with canals, and nearer to us large woods and parks with fine trees in early autumn colours with their tops lighted by the setting sun. In the distance, were the towers of Amsterdam, Leyden, Haarlem, Delft, and Dort. It would be hard to find a mountain 20 times

as high giving a more impressive view than did this sand-hill. When we came down, we had some tea at a little restaurant near the ruins of an old castle (the only ruin, I suspect, in Holland), and then, walking back to Bloemendaal, got a carriage and drove to Haarlem for the pleasure we had still promised ourselves—the hearing of the organ, for which we had engaged the organist to meet us at 7. I half wish we had been disappointed, for then I should have less regretted your absence. It was so exactly what you would have most enjoyed. The huge church was lighted only by the just risen moon shining through some of its highest windows and giving it a solemn ghostly look. We sat there alone for an hour, and heard the wonders of the organ: real wonders they are too, a variety and fullness of tones such as, I imagine, no other organ has. A fugue by Bach was simply marvellous, some of the passages being played on very deepest diapason like thunder, some on pipes that seemed to ring like little hand-bells. We thus sat for an hour, entirely delighted: and they asked us to go up to the organ-loft; and the organist, a sweet old man, like Tennyson to look at, let C—— play. . . . The train brought us back by full moonlight: and mist had so formed on all the meadows about Haarlem that as its surface shone under the moon one could imagine the huge lake still in all the space that it filled till, some twenty years ago, they drained it and made land for all the meadows and gardens and trees that now cover it.

6. *Road to Helder. Sept. 28th.*—Yesterday (Sunday) was spent so quietly that I cannot write a letter about it. We could, at least, rest and be thankful, and could see the Dutch in their holiday ways, and see in them the most admirable manners, gentle, courteous, quiet, self-possessed. In all the crowd there was not one noisy person; nor did there appear one fool, one blackguard, or one wanting to attract personal attention. Really, the crowds were the most well-mannered I have ever seen. And so ended our studies of Holland for the day, leaving me room to write a love-letter, such as you ought to have had long ago or every day since I left you, and would have had if I had written the chief of each day's thoughts. For indeed, dearest, I am getting very tired of not seeing you, not hearing you, not knowing that you are near me, or very soon will be.

7. *Katwijk aan Zee, near Leyden, Oct. 1st.*—If I had wanted a contrast from the usual 1st of October, I might have chosen this place. . . . We arrived after a 12 miles' carriage-drive, in

pelting rain. And then we found it doubtful whether we could be taken in, not because the hotel was full, but because it was empty, dismantled and depopulated—shut-up after the close of the season. However, the one remaining maid and the char-woman received us, and have undertaken to provide for us till the Master comes home, so here we are alone in an hotel big enough for 50, in a great square salon, with four tables, four sofas, and forty chairs; in front of us a wilderness of sand and sea, behind us a huge area of marsh with distant Church towers. But with all this we have perfect fresh air, and all the pleasant noise of the sea, and our mutual love, and a piano. *Oct. 2nd.*—Not even men from childhood to old age seem so different as do rivers in different parts of their course: for here the Rhine, which Germans praise for its wildness, its freshness, its ever changing beauties, has been cribbed into a very straight and evenly bounded channel by compartments, and is governed by five sets of sluice-gates, which only let it go to the sea at low tide. These are so great a work of the kind that I have been quite content to give-up the proposed visit to Helder: for these show better than any how the Dutch keep-out the sea. And very well they do it; with long outrunning breakwaters and the mightiest of lock-gates.

8. *Leyden.* (*The Tercentenary Festival for the deliverance of the town from the Spaniards.*) *Oct. 3rd.*—We have walked about and seen most things. The whole town is decorated with wreaths, flags, banners, busts, pictures, and flowers: much more abundantly than even London on thanksgiving-day: for every little street has its decorations, and all the barges in all the canals carry flags. . . . One chief event of the day was to be the preaching of a discourse—a speech rather than a sermon, though it was given in a pulpit by a gentleman in a black gown—in the great Church; which was to be attended by the King and Queen and Royal Family. Admission was only by tickets, at 4 fr. each; so we had easy access and were amused—edification being, I think, not designed. . . . A large choir sang a chorale of Bach's, and sang it well: a melancholy tune to Dutch words telling the misery and nearly despair and prayers of Leyden. Then the Orator made half his speech—fluently and gracefully. Then came another chorale in grand music, telling the deliverance of Leyden: then the remainder of the speech; and then the 3rd chorale, which was that of Bach's which Mendelssohn introduces into his Reformation Symphony. And there was the end of the

ceremony. It was so terribly unchurchlike that it seemed almost irreligious: there were no prayers; no thanksgivings, except in the chorales; no appearance of clergy; indeed I am not sure that the orator was a clergyman; and there was no reverence as in a Church, men wore their hats as they pleased till the King came-in, and put them on, if they pleased, as soon as he was gone. However, one might be glad to have seen such a sight: it was at least very Dutch and, I dare say, to Dutchmen very strengthening for their policy of union against all attempts at foreign government.

After this, there was a long procession of the trades and guilds of the town, with men dressed in costumes to represent the heroes of 1574, and girls to represent history and fame, and other abstractions. To-night is to be an universal illumination of the town—and then to bed, and, I hope, to sleep: but our hotel is in the middle of the town, with ample accommodation for any quantity of eating and drinking for any number of people of all classes. I fear noise and stuffiness and fleas—perhaps mosquitoes: but I will hope for better things. *Oct. 4th.*—It was well to see the Dutch in a solemn holiday, as we did yesterday, though it detracts immensely from the high repute they might gain in other things. The attempt at a religious ceremony by the better classes made one think them wholly insensible to the beauty of even a reasonable worship: and the merry-making of the lower classes in the evening and night was utterly coarse and indecent. To English eyes they seemed gone wild; singing, dancing, yelling, and drinking, like people wholly uncivilized. And it was not only the lowest classes that did this. To-day, all is quiet. We hoped to have returned to the Hague for English service there, but we were hindered, and went instead to a service in a huge Dutch Church. Oh! it was dreary! just like a Scotch one but worse: for there was only the central enclosed space, into which the people trooped very carelessly with hats on or off, and were shown to pews or chairs (2d. each for strangers) . . . and the congregation all as cold and seemingly indifferent as could not be wished. It is hardly to be imagined that either head or heart could be moved by such a service: and yet the Dutch and Scotch are alike good people, better than French and Spaniards. If we have been happy to-day we deserve the credit: for it is cold and rainy, and the town is in all the dullness of a drunkard after a debauch.

9. *Road to Cologne, Oct. 5th.*—We have greatly enjoyed our stay in Holland. The second week, in which we learned the

stench of canals, the bitterness of wind and rain, the dullness of religious worship, and the coarseness of holiday-fun, as all these appear among the Dutch, seriously damaged the impressions of the first week, in which none of these were found; but, on the whole, I think we shall all end by holding that the Dutch are among the greatest people in the world, and Holland among the most charming places for a short vacation in the earlier part of autumn or—at a guess—in winter.

1875.

In 1875, he had the honour to be elected President of the Royal College of Surgeons. He was, at the same time, President of the Royal Medico-Chirurgical Society. This year, also, he published his 'Clinical Lectures and Essays,'[1] edited by his friend and colleague Mr. Howard Marsh. They include his lectures or essays on gouty phlebitis, on gout in some of its surgical relations, on senile scrofula, and on dissection-wounds: four on strangulated hernia, three on the various risks of operations, four on some of the sequels of typhoid fever, and six on the nervous mimicry of disease: and, what he found especially hard to write, his 'notes for the study of some constitutional diseases.'

Every page of the book recalls his manner of teaching. For example, his advice to students, in the lecture on 'the calamities of surgery':—

One continually hears it said, 'I did my best; but these things will happen'; and yet what a man has called 'doing his best' was not doing so well as he had done before, or so well as he will do next time. Let me warn you against this. Men constantly say, 'These things have happened to better men: they have happened to this or that person of distinction; so I need not be surprised at having them.' There is no more miserable or false plea than this. But there are some people who seem to have a happy art of forgetting all their failures, and remembering nothing but their successes, and, as I have

[1] 'Clinical Lectures and Essays. By Sir James Paget. Edited by Howard Marsh. London. Longmans, Green and Co. 1875.' In 1877, a French translation was published by Dr. Henri Petit, with an introduction by Prof. Verneuil. In 1879, a second edition was published in England, including some lectures on gout, and an essay on some of the sequels of typhoid fever, with additional notes by Mr. Marsh. The book is dedicated to George Paget, 'in token of gratitude both for his love, and for his good example, help, and counsel.'

watched such men in professional life, years have always made them worse instead of better surgeons. They seem to have a faculty of reckoning all failures as little, and all successes as big; they make their brains like sieves, and they run all the little things through, and retain all the big ones which they suppose to be their successes; and a very mischievous heap of rubbish it is that they retain.

And the following paragraphs, from the first of the six lectures on nervous mimicry:—

It is seldom that patients with well-marked nervous mimicries have ordinary minds—such minds as we may think average, level, and evenly balanced. You may, indeed, find among them some commonplace people, with dull, low-level minds; but, in the majority, there is something notable, good or bad, higher or lower than the average—something outstanding or sunken. This something is, in different cases, so various that it is impossible to classify or even to enumerate the diversities. But be clear that these patients are not all silly, or fraudulent. . . . It will be safest if you believe only that, in any case of doubt whether a local disease be organic or nervous, it adds something to the probability of its being nervous if the patient has a very unusual mental character, especially if it be unusual in the predominance of its emotional part; so that under emotion, or with distracted attention, many things can be done or borne which, in the quieter mental state, are felt as if impossible or intolerable. And this probability of mimic rather than real disease will be much increased if the symptoms seemed to follow any great or prolonged mental tension, or if the patient's mind be set, in much more than the ordinary degree, upon the real or the supposed disease. In all the well-marked cases of nervous mimicry, and in the less marked in only a less degree, the malady determines the general current of thought, and often of the whole life. Egotism has its keenest life at and about the supposed seat of disease. If the malady be not always uppermost in the thoughts, it seems always in an under-current, rising at every interval between the distractions of work or play.[1] . . .

[1] He writes to Sir Henry Acland, in 1866, of a patient—'What unsatisfactory and hardly manageable cases these are! This clever, charming, and widely known lady will some day disgrace us all by being juggled out of her maladies by some bold quack who by mere force of assertion will give her the will to bear, or forget, or suppress all the turbulences of her nervous system.'

In this egotism they resemble hypochondriacs; yet commonly with a great mental difference, in that those with neuromimesis are not distressed with constant forebodings of greater mischief; they do not suspect that everything they feel is a token of something much worse than can be felt; rather, they are content and often almost happy in their afflictions. While the hypochondriacs are in a panic on account of some trivial aching, the neuromimetics will talk of their agonies with calm or smiling faces, or with half-closed quivering eyelids; some seem proud in the immensity of their ailments; in some, there seems an unbounded capacity for the enjoyment of suffering.

This egotism in relation to the imitated diseases gives to many patients an appearance of great wilfulness. Some, indeed, are very strong-willed; some are so for all the good designs in which they engage, and some with a thorough, almost diagnostic self-service. But strong will is, I think, less common among these patients than is a want of will. Sometimes there is a general feebleness of will. . . . But more often you will find a feebleness or complete negation of will in reference to the supposed seat of disease, while towards other things the will is strong enough. You may find the strangest inconsistencies in this respect. A man who has intellect and will enough to manage a great business, or to travel with much inconvenience and write clever books, cannot will to endure sitting upright for ten minutes, or cannot distract his attention enough to be indifferent to an unmeaning ache in his back. A girl who has will enough in other things to rule the house has yet not will enough in regard to her limbs to walk a step with them, though they are as muscular as ever in her life. She says, as all such patients do, 'I cannot'; it looks like 'I will not'; but it is 'I cannot will.'

But I think I may assure you, that to regard all mimicries of organic diseases as essentially mental errors would be bad pathology and worse practice. Some mimicries are essentially mental; such, for instance, as those in which patients, out of mere fear and keen attention, acquire the pains of cancer, and localise them in healthy parts; and in nearly all mimicries a mental influence may be discerned, just as it may in nearly all real diseases in which consciousness remains—an influence often impossible to separate or weigh, generally increasing with the duration of the disease, yet not essential to it whether it be real or mimic. But in some mimicries it is hard to

discern any mental influence at all. Some are imitations of diseases very far from mental associations. Some are found in commonplace, ignorant, and slow-minded people who never saw or heard of the diseases imitated in them. Some occur in children who could neither imagine nor act what they tell and show, though as they grow-up they may become those in whose successive mimicries the mental influence takes a constantly increasing part. And, to end whatever may be ascribed to mental influence, it can produce mimicry of organic disease in only certain persons whose nervous organs seem wholly prone to this manner of disorder, and whose spinal and ganglionic systems must be deemed erroneous, as well as, or more than, their brains. For nervous mimicry is not very frequent among the evidently insane, and among the sane there are many who cannot bring about a mimicry of disease by any effort of imagination or direction of the mind. Among these I am happy to count myself. I have tried many times, carefully, and with good opportunities, but have always failed.

Letters to his Family. 1875.

1. To H. L. P. *Sandringham, Jan. 17th.*—The party here is chiefly diplomatic—with the Danish and Greek ministers, an Austrian attaché, and our own Belgian ambassador—who tells me that there is no chance of the Brussels people getting the van Eyck from Ghent, or of the Dean and Chapter of St. Paul's getting the great candlesticks back again, though they have been offering very liberal terms for them. Their failure may save them from a blaze of Protestant indignation. Such candlesticks would look like the thin edge of a very large wedge indeed. *Feb. 21st.*—I am very sorry for the failures at Christ Church of which you tell. I suspect that cleverness was at the bottom of the failure: for it is a character of mind the exercise of which is so instantly and pleasantly rewarded that the temptation to cultivate it is always present, always diminishing the feeling of need to work with better mental powers for better rewards that are far off. Certainly, of all good mental powers, cleverness is the most dangerous, unless it can be held-down, even with violence, by some better power, and made a lower servant where else it would be master. . . . I have had some talk with Dr. Newman, and taking together the marvellous acuteness of mind which his last letter shows, and the charm of simplicity and gentleness which he has in conversation, I should think him the most persuasive man I have

known. If I had not had an education in science, and learnt the exceeding danger of deductions, and the right and need of doubting all that has not clear evidence of fact or revelation, I should think it dangerous to see him. Egerton Hubbard is, I hope, safe now; but he has had a narrow escape: a blow a few pounds heavier, or at some minutely different angle, must, I think, have been fatal—but these would appear to be the risks of almost every day's life, if we could see all that we escape.

2. To H. L. P. *April 25th.*—I was away nearly all yesterday, having to see a case at Hull—my second journey into Yorkshire this month. The rest in the travelling was really very pleasant: for I was alone in the carriages on both routes, and had plenty to read and write when the scenery was either not visible or not worth seeing. But I gather little more than money in these travellings. Only, near Bradford I saw unintended excellence of costume in the women, who all wear woollen shawls drawn close round their faces, putting them in very becoming frames, better than any cowls. And at Bradford itself, where I arrived at six in the morning, I was charmed with a beautiful carillon from the top of the very good tower of their Town-hall—as charming a thing as could come on a bright sunny morning after a long night's journey.

3. To C. P. *May 23rd.*—We have often looked gladly at the sky to-day, thinking how you all may have been enjoying Oxford looking in all its beauty: as beautiful a sight as even the furthest-off town we can reach can offer. Our own day has passed quietly and happily; our wedding-day; its 31st return; and certainly the first, since you were born, which we have spent alone. But you will not be vexed if I say that we have found that we can, for a day, or at least for this day, be happy without any of you. For the day brings the remembrance of so many blessings, and of so long undisturbed unfailing love, that one can find not one ground for grief, except in one's own unworthiness and ill use of God's great mercies. I can not imagine a happier married life than our's has been: unchanging love, good, very good, children, prosperity, health—we could not have asked for more: I could not have dared to hope, scarcely even to ask, for so much.

1876.

From 1876 to 1881, he was a member of the General Medical Council, as the representative of the College of Surgeons. It was, of all his official work, the part that

he most disliked and had least faith in. (He was appointed on July 13th, 1876, being at that time President of the College of Surgeons. In May 1877, he was elected a member of the Finance and Executive Committees. He was actively concerned in the allotment of part of a Government grant (1876) for the promotion of Physical Science; in the amendment of the Medical Act of 1875, and of Mr. Russell Gurney's Act; in the questions relating to the diploma of Licentiate in Dental Surgery; and in the progress of the Conjoint Scheme of examinations. He remained a member of the Executive Committee from 1877 to his retirement from the Council on June 9th, 1881.)

On Nov. 14th, 1876, he communicated to the Royal Medico-Chirurgical Society his paper 'On a form of chronic inflammation of the bones (osteitis deformans)'—the first account that had been given of this disease. He also, as President of the Society, gave the customary annual address, with short obituary notices of the 21 Fellows who had died during the past year, including Sir Charles Locock, Luigi Porta, and Gabriel Andral. The labour of preparing all these obituary notices was very heavy. In December, he was elected an Honorary Member of the Odontological Society of Great Britain. Other events of the year were a great conversazione that he gave at the College of Surgeons, as its President: and a long and memorable holiday in Italy, the one holiday when even he, after three rushing days at Florence, confessed that he was weary of sight-seeing.

Letters to George Paget. 1876.

1. *June 12th.*—Quain has resigned his place in the Medical Council, and I have reason to believe that *my* Council will wish me to succeed him. I am very sorry for it; for I dislike the kind of work; it distresses me, costs me huge labour, and keeps me always self-discontented. I hoped that after next month I might be free, and gradually retire from it altogether, and give myself to scientific work and some recreation and self-cultivation. But I suppose I had better keep to the rule which has hitherto worked well—never to refuse duties or offices which come in the plain course of events. If you can tell me a good ground against it, I shall be very glad.

2. *Florence, Sept. 7th.*—I have enjoyed the holiday im-

mensely, and almost constantly: but I am forced to feel that I do not bear travelling so well as I did in our last real tour of 10 years ago. I suppose I shall be better even in bodily health for the change, for it is as great as that which a fever could work: mentally, the utter idleness must, I think, do good: but I am in more doubt than I used to be about the great utility of this kind of vacation—I mean for myself: I begin to think that a quiet retreat like your's is better. However, I shall not soon settle this; nor yet one or two questions more which I have to ask myself when I think of the beginning of work again. One of them is, whether I should diminish my professional work by giving-up operating,—and, though I have no right to ask you for a clear opinion, yet I should be glad if you will think about it for me. I could afford to do it, if I were to lose no more than the present profits of the operations themselves: but I should not like to lose much more, and I might do this if the step were to lead to a belief that I was retiring altogether. But all this would make a long story to write after a full day's working at pleasure in Florence. *London, Sept.* 19*th*.—We came home a week sooner than I planned, partly because we had taken-in as much of nature and art as we could hold. We had begun to feel 'stodged': the mediæval art at Florence, especially, had quite filled us. Besides, I was inclined to have a few clear days before beginning full work again.

3. *Dec.* 21*st*.—Let me wish you many happy returns of your birthday, and hope that the wish may be fulfilled as well, though not in the same way, as those of fifty and more years ago. The hope, I think, is well-grounded: for you are blessed with good blameless children in whose welfare you may find more happiness than (as it now seems to me) is possible in anything that may happen to one's self after 60. Work grows more burdensome and the pleasure of success less keen; or, if not less keen, yet more needing to be repressed and unsought. However, any how and to whatever end (God knows best) let me wish you all happiness.

Letters to his Family. 1876.

1. To S. P. *Feb.* 13*th*.—I hope you have seen 'Vanity Fair.' The face seems to be fairly like, the figure absurdly unlike. The account of me is a good instance of the value of what 'people' say. You see I have never given a lecture, or written a book, or worked in a Hospital, and I should have

lived in poverty and utter obscurity if I had not got Court favour by marrying some one who had some connection with the household of the Duke of Kent. This is, probably, about as much as 'people,' generally, know of one another. However, I am well out of the whole affair: there is nothing offensive in it, nor anything likely to suggest that I have courted or encouraged the publicity—and I am sure no one has laughed so much at it as I have: it has kept me in danger of 'bursting' even since I bought it. Your dear mother was sadly vexed: but even she is beginning to laugh. All things pass quietly with us: my work is heavy, heavier perhaps than in any past year; but, thank God, I bear it easily.

2. To H. L. P. *March 16th.*—I cannot pretend much pity for the fate of the Torpids. I have not the least belief in the opinion that a good man is likely to be the better for being a good rower or in any way a distinguished athlete: I do not remember any one among my many pupils who was in both ways distinguished. And I am glad that you are off that foolish training-diet: I am nearly certain that it is mere useless folly.[1] *June 4th.*—I am seeing Sir Salar Jung and having the amusement of seeing the 'splendid retinue'—nearly all more gorgeous than the great minister himself, and some of them most picturesque. The silent gravity with which they separately stand and move about him—as many as would make a crowd in a room—speechless and noiseless, is very strange.

3. To F. P. *Nov. 5th.*—The pleasure of writing to you on a Sunday evening was always too great for me now to give it up willingly; though as we grow older there seems less to write about, each having his plan in life pretty clearly set. Mine at least seems clear for some months (if all be well). I have finished my paper on the big bones and the disease for which you justified the name 'osteitis deformans.' It was a real pleasure, the working at it; a renewal of the old pleasure of studying and describing museums in which I spent so long a time years ago. And now I have my (Hunterian) oration and my biographies (for the Medico-Chirurgical Society) to write; and I 'start' so many things for study, and see so many lines of thought, that I could wish I had not anything else to study—if it were not for my being sure that among the fallacies of coming old age is that of a belief in an ability to idealize, and to be clear in metaphysics.

[1] The training-diet at Oxford, a quarter of a century ago, was a very solemn and elaborate business, founded more on tradition than on science.

V

1 *HAREWOOD PLACE, HANOVER SQUARE.* 1877–1881.

1877.

On Feb. 13th, Sir James Paget delivered the Hunterian Oration, at the College of Surgeons. Among his audience, and close to him, were H.R.H. the Prince of Wales, Mr. Gladstone, the Duke of Argyll, the Duke of Westminster, Dean Stanley, Lord Acton, Mr. Huxley, Mr. Tyndall, Lord Ripon, and many leading men of his own profession. He stood under Reynolds' magnificent portrait of Hunter; and the fog outside rather added to the effect of the scarlet gowns, and the keen faces of the physicians and surgeons all watching and challenging him. He spoke slowly and steadily for the hour that is allotted by custom to a Hunterian Orator, without once hesitating or losing the charm of his voice. At the festival-dinner in the evening, Mr. Gladstone proposed his health: and he said for reply, 'There is only one way in which it may be possible to surpass Mr. Gladstone as an orator, and that way I will proceed to put in practice. You all know that, although speech may be silvern, silence is golden. You shall have the gold.' On Feb. 18th, Dean Church writes to him:—

> Mr. Gladstone divides mankind into two sets, the happy minority who heard it, and the to-be-pitied majority who by their fault or misfortune had not the good fortune. Your ears must have tingled, I think, last evening, when he was giving his judgment on your oration as a unique work of art in its kind, a 'miracle of compression.'

Three passages may be quoted here, that refer to Reynolds' portrait of Hunter, to the recent death of Sir William Fergusson, and to Hunter's final influence on surgeons:—

> 1. I cannot doubt that in the contemplation of the order and mutual fitness in a great field of scientific truth there may be, to

With the Membership of the College and legal fitness for practice there came soon the question as to what I should do and where and how should try to live. And this had to be soon decided; for there was no money to share, no promise of any likely to come in. I had done, as my father thought, so well in the school that a ~~[illegible]~~ partnership with one of the surgeons in Yarmouth — the dullest of them all was meant — might be ~~[illegible]~~ bought for very little. Or, I might try my chance of living in London, waiting and watching for "something to turn up". Of course I inclined to this but not, so far as I can remember, with any great determination or any clear plan; and after four months I drifted rather than sailed or steered back to London in October 1836. It was hard to settle what to do for the best, and nothing was settled, there was a kind of understanding that I should maintain myself, if I could, and that, if I could not, my father would send me, if he could, ten pounds a month; and that this might be tried for some six or more months —

1. Harewood Place,
Hanover Square
W.

I had scarcely started on this plan before I became engaged. It would have been difficult to do anything not immoral which could have ~~[illegible]~~ seemed to any reasonable person more imprudent; and it is not to be pretended that wisdom, discretion, forethought or any ~~[illegible]~~ method of sound judgment had anything to do with it; I had ~~[illegible]~~

FACSIMILE OF PAGE OF SIR JAMES PAGET'S MEMOIRS

some high intellects, a source of pure delight such as are the sensuous beauties of nature to the cultivated artist-mind, or virtue to the enlightened conscience. I believe that in contemplation such as this Hunter enjoyed a calm, pure happiness. So Reynolds, his friend, seems to tell of him. In that masterpiece of portraiture, which teaches like a chapter of biography, Hunter is not shown as the busy anatomist or experimenter pursuing objective facts; the chief records of his work are in the background; he is at rest and looking out, but as one who is looking far beyond and away from things visible into a world of truth and law which can only be intellectually discerned. The clear vision of that world was his reward. It may be the reward of all who will love the scientific life with the same devotion and simplicity.

2. We still have our distinctions of practical and scientific surgery, of the art and the science. And though the differences between them diminish every year, yet they will remain; and it is well they should do so, for they are suited to men of different tempers, tastes, or opportunities. Yes; both will remain, though Fergusson is gone: the greatest master of the art, the greatest practical surgeon of our time; and men can no longer watch the eyes that were so keen, or try to imitate the hands that were so strong and yet so sensitive and swift and light; or wonder at the ready and clear knowledge, the prompt invention, the perfect calmness in the midst of danger.

3. And mark, now, what Hunter did for surgeons. Before his time, they held a subordinate place in the medical profession. A few, with rare ability, had held good rank—as Wiseman, Cheselden, Hawkins, and Pott—but generally they were inferior to the physicians. And justly so: for the physicians had not only better knowledge of their proper calling, but a far larger number of them were men of higher culture, well-educated gentlemen, and the associates of gentlemen. Besides, they were the chief teachers of all the medical sciences, the teachers even of anatomy to the surgeons. After the time of Hunter we may trace a well-marked change. Physicians worthily maintained their rank, as they do now; but surgeons rose to it, and in the lessons of Hunter surgery gratefully repaid medicine for the teachings of a century. Following Hunter in the pursuit of science, surgeons soon became the chief anatomists, equal as physiologists and pathologists, and they gained entrance into the ranks of

the most educated class. Yes; Hunter did more than anyone to make us gentlemen. And the lesson of this fact is plain and emphatic, for it was not by force of social skill, by money, or any external advantage that he did this. From the few records that we have of him it is clear that he was a rough and simple-mannered man, abrupt and plain in speech, warm-hearted and sometimes rashly generous, emotional and impetuous, quickly moved to tears of sympathy, quickly ablaze with anger and fierce words, never personally attractive, or seeming to have great mental powers, and always far too busy to think of influencing those around him. He had few friends, he gained the personal regard of very few, and no one ever paid him the homage of mimicry. The vast influence which he exercised on surgery and surgeons was the outcome of the scientific mind. What follows? Surely, that if we desire to maintain the rank of gentlemen, to hold this highest prize of our profession, we must do so by the highest scientific culture to which we can attain. And to this we are bound, not for our own advancement alone, but by every motive of the plainest duty.

He was appointed this year, on the death of Sir William Fergusson, Serjeant Surgeon to Her Majesty Queen Victoria. In February, he was elected an Honorary Member of the American Academy of Arts and Sciences. In March, his Presidency of the Medico-Chirurgical Society came to an end: and at the last meeting of the session he gave, as in 1876, the annual address, with its obituary notices; including those of Southam, Stromeyer, Ehrenberg, Sibson, Lee, and Fergusson. He writes to his brother, 'I finished my Presidency at the Medico-Chirurgical Society last night, and so brought to an end the heaviest work of two years that I have ever done: for besides all the professional-official work, I have had in them larger practice than in any former years. Thank God the work does not seem to have hurt me: I feel as if I could (though I would not) do it again.' On May 29th, he and Lord Wolseley and Sir Francis Doyle were elected members of The Club. His summer-holiday was in Gloucestershire, that he might be near his elder daughter, who was married this year to the Rev. H. L. Thompson, then rector of Iron Acton, Gloucestershire, now vicar of St. Mary's, Oxford. On Nov. 27th, he communicated to the Medico-Chirurgical Society his paper on 'Cases of

Branchial Fistulæ in the External Ears.' The following (undated) letter from Mr. Darwin seems to refer to this subject :—

My dear Paget—Very many thanks for your note. One is led at once to suspect reversion, though that is an easy and tempting trap to fall into. Your sketch has called up a fairly vivid recollection in my mind of a gentleman with whom I used as a boy often to shoot, and who had ears such as you describe. I must look to the ears of our brethren in the Zool. Gardens. Yours very sincerely, CH. DARWIN.

He writes this year to one of his sons :—

Oct. 21st.—Last week, Dr. Farre dined here, for I wanted to cheer him after his long illness : and after dinner he and Owen and I sang 'Mijn Heer van Dunk' (we used to sing it together 40 years ago). And then Mr. Charles Hawkins, considering that we were not all failures in life, told us an apposite story, that when Prescott Hewett was just starting in practice he was dining one day at Sir Benjamin Brodie's, and after dinner turned over the leaves for Miss Brodie, who was singing. Whereat Brodie, in a sort of alarm, said, 'Hawkins, I hope Hewett is not musical,' as if this would be a sure bar to all success. He was a cold dry tasteless man : but there was some meaning in his fear ; and you will see the 'moral' of the story. Goodbye, God be with you.

1878-1879.

In 1878, after long thought on the matter, he gave up operating ; except for a few operations of minor surgery. His consulting practice remained as heavy as before, or was even heavier : and he had many country-journeys. But these rather refreshed him, though he used always to read or write during them ; he was proud of the neatness of his handwriting in the train, and had odd ways of sitting so as to ensure it. But the change of work, and the sight of the country, always pleased him. Letters to his wife, in 1875 and 1878, refer to this part of his practice :—

1. *April 12th*, 1875.—I was heavily worked all day, and had only just time to dress for Grillion's, where I had part in a quiet pleasant dinner, sitting next to Lord Acton, one of the very gentlest and most learned of men. Some very good

stories were told, but they were too long for me to write *this morning*, especially as I have promised to start for Bradford at 12 (midnight). *April 14th.*—A very full day's work; then the Medico-Chirurgical from 7.30 to near 11: then some food, and a start at midnight for Bradford in a Pullman car. I did not sleep for an instant; the novelty and noise kept me awake; but it was pleasant enough to lie warm in a good curtained bed, and think of the contrast between this travelling and that of 40 years ago. At my long journey's end, I had, after my work, long walkings in and about a garden in bright warm sunshine such as I had not felt this year. I could hope that you were enjoying even brighter and warmer weather, and gaining of God's goodness health and strength. You will not expect a very long letter to-night: for you know the number that generally wait for answer after a whole day's absence.

2. *June 23rd*, 1878.—From Bristol, I was driven out about five miles to one of the most charming houses I have ever seen. The grounds reach nearly down to the junction of the Avon and Severn, and through a long avenue one sees the broad glistening of both rivers, and the ships moving on them. And from a hill I caught sight of our last year's scenery at the cliffs by the Old Passage and across by Chepstow. It was enchanting, and even better when I walked back to Clifton—a good four miles—through charming fields, and over the downs where hundreds were making holiday at cricket-matches. I have rarely enjoyed a business-day so much: I felt ashamed to be well paid and profusely thanked for it. I should have ended with long as well as sound sleep, but that I was called-up at 4. However, the case was one for which Marsh was fitter than I: so I sent it on.

His 1878 holiday was again in Gloucestershire; in 1879, he went to the Dolomite Alps and North Italy. His letters to his brother are concerned with a second invitation to give the Rede Lecture; with the affairs of the General Medical Council; and with the question of giving-up operating.

Letters to George Paget. 1878, 1879.

1878.

April 12th.—I greatly wish that I could give the Rede Lecture. I believe that I could really enjoy the giving of it. But I have not a fit subject, and, if I had, I could not get

ready in a month or two at this time of the year and with Medical Council affairs on hand. I will write to the Vice-Chancellor my warm thanks and regrets.[1] . . . We passed a resolution to-day in favour of Conjoint Examinations being made compulsory. But the majority was only 4; 14 to 10. All the Scotch members and all but two of the Irish were in the minority. I greatly doubt whether the majority was large enough to carry the necessary weight.

2. *Gloucestershire, Sept. 3rd.*—I write to ask your opinion on a matter on which you gave me good advice two years ago—the question whether I should give-up operating. You advised against it at that time and, I do not doubt, were right: but now I am older, and need rest more than I did, and am even more fixed in merely consulting practice. I shall soon be 65—the age for retiring from St. Bartholomew's and other large Hospitals. . . . It would be a great grief to me if I were to do mischief through being less clear-sighted, or even less dexterous, than I have been. I am certainly overworked—having rarely less than 15 or 16 hours a day. . . . I am disposed to give-up all operations, unless you advise against it on some such grounds as that it would be too like a suggestion of readiness to give-up everything. My impression is that it might go, like a detached bit, and leave the rest unchanged. Will you kindly think over this and let me hear?—even a Yes or No will do.

We are living comfortably here in a house just big enough for our diminished party (we are only 5) and with one of the loveliest scenes in Gloucestershire always in view from our windows. We work at Vegetable Morphology for 3 or more hours every day: it is intensely interesting. I wish I could be out of the Medical Council: but this cannot be: I shall, however, not be President: Acland, I think, will be re-elected. I would absolutely refuse. I see no way to diminish work, except that I have written of.

1879.

1. *March 27th.*—The meeting of the Medical Council was, I think, very unsatisfactory. We sat for 8 days, and on 6 of them decided to do nothing. I greatly doubt whether it will be wise for me to continue on the Council. This meeting, at the end (if it be the end) of the long winter, has terribly tired

[1] In 1880, he was again invited to give the Rede Lecture, and was again compelled to decline the invitation.

me: indeed, I have never been so beaten by mere fatigue and cold as I am now. The bill, I believe, will not pass, and all the bothers will accumulate.

2. *Oct.* 17*th.*—Pardon my railway-writing. I am asked, officially, to be President of the Pathological Section at the meeting of the British Medical Association at Cambridge, and before I decide on my answer I should like to know what you think of it, and whether you propose to take an active part at the meeting. I should not attend it at Cambridge more than any other place, if it were not for the pleasure of being associated with you. So my course will depend on your's and on your opinion. The mere presiding and, if need be, the giving an address would not be very troublesome, for I have to get-up pathology for the (new edition of the) College Catalogue.

Letters to his Family. 1878–1879.

1. To C. T. *July* 28*th*, 1878.—I am tired, but I sleep well and, in railway-journeys, am often in fresh air and fresh scenes and as if out of the world; a real recreation in the routine of life. I should like to begin my vacation sooner: but the chances of some of the Parliamentary work of the Medical Council must detain me, and I do not like to desert Acland, who might have to war alone. It is hateful work: unless for the sake of change even from better to worse: but Acland is so earnest in it and so right and unselfish that I cannot but work with him. And it is almost amusing to see a little of official and parliamentary life: its keenness and heavy work, and the self-denial to which some submit for their duty or their party. It shows me the business-side of that of which Grillion's shows me the pleasure.

2. To S. P. *June* 5*th*, 1879.—I entirely agree with your estimate of the excellence of Oxford for scientific teaching, and never fail to say that it is the best I know. I fear you will find more pressure and confusion in the London work—too much to be seen, and too many, of sorts too different, to look at it. But after some confusion the *Orientirung* will come, and then all will seem great and splendid. It will be an immense pleasure, if we can do some of the work together: and I am not without hope that I may sufficiently overtake the modern pathology on some of its lines to be able to talk the same language with you. I am steadily at work on it for the (new edition of the) College Catalogue, and find almost as much

pleasure in it as when I began the study of the old nearly 50 years ago.

3. To C. T. *Dec. 8th*, 1879.—. . . . Men should all marry: there are none, I believe, but need at some time, if not for great part of life, the comfort and healthiness of a complete home—such, by the way, as the 'Darby and Joan' which you admire tells-of. I am rejoiced at the coming-in again of such songs. It is the result of the need of change, which I have been expecting, from the excess of 'classical' music in which some have been indulging themselves and many more have been horribly bored. It is a protest of the same kind as bright crimsons are making against the medicinal greens and browns that people seem to be at length sick-of. Among Darbies and Joans, I have just heard of the chief instance: our friend John Simon's father is 97, and at last seems dying, and his wife, who is 92, cannot be persuaded to have a nurse, for she is sure that she can herself do everything for him.

1880.

In August 1880, at the Cambridge meeting of the British Medical Association, he was President of the Section of Pathology. He took, as the subject of his Presidential Address, 'Elemental Pathology'—the diseases and injuries of plants and trees. He also contributed a short paper, 'Suggestions for the making of Pathological Catalogues.'

This address on Elemental Pathology was the outcome of an immense number of observations made during his holidays, and at all odd times, such as country-journeys, or rare Saturday half-holidays at Kew or Richmond with 'tea out.' The study of galls had been in his mind for years; in 1874, he writes to Sir Joseph Hooker—

> Let me thus introduce to you Dr. Hollis, one of my colleagues at St. Bartholomew's. He will show you a paper on oak-galls, and specimens illustrating his descriptions. The facts he tells seem to me very interesting in a pathological view: for they show all the essential results of an inflammatory process consequent on what may be deemed 'irritation' of structures where no nervous system or moving blood is near.

And, during his 1878 holiday in Gloucestershire, he used to spend the mornings over microscope-work, with Sachs' great Text-book of Botany; studying not the

classification of plants but their physiology, and the structure of their tissues—the development of the embryo, the movement of the pollen-tube, and the circulation of the contents of the cell. On the long afternoon-walks, he would gather autumn leaves, galls, and tumours of holly and beech; and there was a cedar at Iron Acton that yielded many good specimens of those *holz-geschwülste*. Even in or near London, he used to pick-up dead twigs and leaves as he walked, to admire the methods of their separation and decay. Among his papers, there are nearly two hundred pages of manuscript notes on the diseases of plants, and a collection of water-colour drawings of leaves. He loved the subject, partly for the poetry of it, partly for the novelty, but chiefly because it took him back to his old study of the symmetry of disease, and justified him in his unwillingness to call in the nervous system to explain certain facts in human pathology. Hypertrophy and atrophy, degeneration and regeneration, the healing of wounds, necrosis, specific diseases from the irritant action of specific poisons, tumours developed from vestigial embryonic tissue—all these were to be seen in structures that had neither a central nervous system nor a circulating blood. Nothing, in all the scientific work of his later life, gave him more pleasure than this new study of vegetable pathology; especially, the symmetrical colour-changes of decaying leaves.

Five months before the Cambridge meeting, he writes to his brother:—

March 8th, 1880.—I have been for some time working a little, and thinking much more, about what may be called Elemental Pathology—the changes of decay, disease, and repair in plants, and of repair in crystals. There appear to be many facts and general rules which, occurring in these comparatively simple structures, may be studied in illustration of what is much more obscure in the pathology of ourselves and other animals. Many of the facts are very curious in relation to *e.g.*

degeneration—in the decay of leaves;
repair—in the mending of broken crystals, and wounds of trees;
inflammation and specific diseases—in galls;
necrosis—in the fall of leaves and fruits;

and so on. I have a mind to write something about them, not

so much for new facts as for showing old ones in the light of our pathology: and it has occurred to me that the subject might do for an opening address in the Pathological Section in August. What do you think? It might be useful to show to even small country practitioners that they are surrounded with the best opportunities for the best study of scientific pathology. Let me know your mind on this—and, if you like, you can ask the President Elect—but I would rather be guided by you.

To-morrow, I shall have been 50 years in my profession. What a rare amount of happiness it has given me! I cannot think of a fault in it, whatever opportunities it may have given for my own. I hope my 'Elemental Pathology' is not a sign of the decay which after 50 years may be deemed timely.

Because of the importance of this Cambridge address,[1] it will be best to reprint a considerable part of it, and to put this reprint separately, after the letters of this year.

His letters to Sir Henry Acland are concerned with the Medical Act Amendment Bill, and with the progress of the plan for conjoint examinations:—

1. *Feb.* 1*st*, 1880.—I would do many things to bring the Medical Legislation to an end, but, surely, some of those you name would think it a great bore to meet for talking of medical affairs. My knowledge of Sir Stafford Northcote is hardly enough for asking him to come here for pleasure: and if I want to see him on business he may fairly say 'Come to me—and during business hours.' I think the kind of influence which we want to exercise may best find place in quiet talk with those in power or with political weight; and I would go to any of them, alone or with you, on condition of their giving leave—*e.g.* to Mr. Forster, or Sir S. Northcote, or Mr. Lowe, or any. It seems probable that if the demand for compulsory conjoint schemes were given-up, and some of the body of the profession

[1] The publication of this address brought him a number of letters, both from medical men and from horticulturists. He writes, on Nov. 10th, to Sir Henry Acland, 'All the news from Oxford, the *Times* article of yesterday, and your note of the "rampage" to-day, make me weary of medical education as a subject of study. And I find a large field of practice open to me among Clubbed Cabbages, dropsical Cucumbers, and other like things suggested in letters consequent on my address. I hesitate, and do not yet decide to change my line.' His friendship with Miss Eleanor Ormerod, for whose work he had the utmost admiration, began about this time: he was in correspondence, also, with Canon Ellacombe, on the analogies between a green rose and a rickety child, and on the nature of the poison that killed Hamlet's father.

(whatever that means) were to be put on the Council, the rest of the bill might be carried. This is the best thing now possible: we may wish for other things as better, but, as they certainly cannot be had, we had better cease for some time to wish for them, and take what we can get, and then do our real and proper work.

I suppose that Mr. Forster is not in so judicial a position but that he may see witnesses in private. Perhaps I may see him at Grillion's on Saturday morning. Will you not be there?

2. *Feb. 3rd.*—I was with Simon at the College yesterday, and he told me he was earnestly at work in the hope of getting a bill through, this session; especially, communicating with the Scotch, who he seemed to think might agree to the kind of compromise about conjoint schemes which was expressed in the Duke of Buccleuch's resolutions. I write this to you, though, probably, you already know it, for the sake of suggesting that, in anything we may say to any minister or other man of weight, we may not seem to be among ourselves, in England, much divided. I should be contented with less than, in the matter of conjoint schemes, Simon and you wish-for: but it seems important that he should not be striving for one thing, you and I for another. So I hope you will keep in communication with him and let the real influence which he has (in England if not in Scotland) have full weight towards bringing these time-wasting discussions to an end.

3. *Feb. 10th.*—I had another talk with Simon, after College-business yesterday, and he told me some of his proposals about the conjoint schemes. I suggested to him what seemed to me, after Saturday's breakfast (Grillion's), likely to be useful—that we should ask Forster, Lowe, and Playfair—to whom he added Plunkett—to consider the whole matter and recommend what they think fit, on the understanding that we would accept what they recommend and do our best to get it passed this session. We may be as certain as of anything, that they would recommend something as near the best thing as is possible: and that if what they recommend be accepted by the Government, there will be a better chance of passing a bill this year than by any other means within view.

Simon seemed not quite averse from this suggestion, and of course it leaves it open for him to urge his own proposals on Forster and the others. For myself I would certainly do anything to promote whatever the four would advise. What think you?

4. *Feb.* 12*th*.—It is very good of you to offer to go to Edinburgh and Dublin, but I think that the result would only be the finding again that the Members of the Council differ very widely in their opinions and are not at all likely to be reconciled. There is no chance that the Council will ever agree on any considerable change which will please all its own members *and* the public (so-called). Besides, the changes to be made must now be determined by Parliament, and no change that one can think probable can be so mischievous as this long discussion has been. The plan I suggested for bringing the discussion to an end should be brought-about, I think, unofficially and quietly. You might quietly suggest it to Forster; or I to Lowe—or anyhow. Let the four quietly settle, if they can, what is best to be done and let them move the Committee to do it; and let us help them by any personal influence we may have. The whole matter is in the position of a case for arbitration, and the four named may be as arbitrators by whose decision all should be glad to abide.

He writes to Sir Joseph Hooker, on the question whether medical women should be members of the forthcoming International Medical Congress in London :—

July 22*nd*, 1880.—I think that I am of just the same opinion as yourself in regard to the admission of women to the profession and to the Congress. But while we and some more are 'on the whole' and 'rather luke-warmly' in favour of their admission, there is a very much larger number who are so altogether and hotly against it that in any meeting they would carry their opinions by a very large majority and a very loud one too. Their objections are, I believe, chiefly sentimental: but I cannot help feeling that their sentiment 'against' is so very much stronger than my reasons 'for,' that the sentiment may, in a question of this kind, have a right to prevail over the reason.

I may confess, too, that I am influenced towards a negative posture in this case by what I have heard of some of the American and Zurich women-doctors, whom it would be difficult to exclude though few decent Englishmen would like to be associated with them. Let me add that the 'legal qualification' does not give legal right to be a member of a voluntary association. No doubt there will, in any case, be a row: but the row in the event of exclusion will, I can assure you, be far less than it would be in that of admission.

Of the following letters to his family, the first two refer to that form of analogy which was afterward popularised and, in his judgment, misused, in Prof. Drummond's book 'Natural Law in the Spiritual World':—

1. To F. P. *March 3rd.*—I have been gladly thinking of your questions and gladly write of them. I fear that the analogy fails, or, at least, is made very distant, in the fact that repair is accomplished, not by a new power, but by the old inherent power of the injured part exercised in a new method. The power to repair itself belongs to the subject of injury in the same sense and degree as does its power to develop itself and grow and live. The wonder of repair is that this indwelling power is, by the injury or disease, diverted from its usual method into another, which, though determined by an 'accident,' is as purposive and well-designed as is any process of habitual life. Still, it is the same power: not therefore comparable, even in a figure, with the divine power which, in the Atonement, achieved for the repair of humanity what the human power could not do. But of this you will judge better than I. I will send you by book-post to-morrow a copy of lectures on repair, in one of which you may read, if you like, more on the subject. Much of what is there said will still hold as matter of fact, though the lecture is 30 years old—and the lecturer much older than he thought he ever should be. *March 8th.*—Concerning repair it seems worth saying that, since I wrote to you, I have been reading about the repair of damaged crystals, and have found that the facts mentioned in my lectures have been often and variously confirmed; so that it is more than ever certain that the power of repair is not confined to living things. Broken crystals can repair themselves as well as *e.g.* broken bones; and I believe that it may be stated as a general truth that wherever we find evidence of an end or design to be fulfilled in the attainment or maintenance of a definite form, there, also, we may find evidence of some power to repair the injuries which that form may sustain from forces external to itself. (This is probably not verbally precise: but the facts it is meant to generalize are certain.)

2. To C. T. *June 14th.*—My chief business seems to be—my newest business is—to think of making speeches: for I am to take the chair at a big College dinner on the 1st of July and at the Hospital dinner on the 1st of October: so that if I fulfil my engagements, I shall have proposed the so-called usual

loyal toasts three times in this year, besides making speeches at the Academy dinner, the Grocers' Hall, and the Shrewsbury School dinner. It is an occupation best discouraged: it is hardly possible to avoid rather tall talk and speaking more positively than one should.

Here, after this letter, may be the place to put something about his public speaking. In his Memoirs, he has said nothing that recalls the beauty of it, the distinction and refinement, the exact choice of the right words. His voice was clear, and musical within a narrow range of notes; not very strong, not deep or resonant; but measured, quiet, and as it were always in time and in tune; and his slight Norfolk accent was part of the pleasantness of it. The Millais portrait gives just the vivid, straightforward look of him speaking. He had few gestures; only, he would sometimes raise his hand, or rest his chin on it, till some grave sentence was finished. Of his after-dinner speeches, probably those were the best that were least elaborated: men remember, for example, the singular charm of his speaking at the First of October dinners at the Hospital; how he would stand till the cheering stopped at last, and then would speak with the utmost simplicity, in such words as he used for his little speeches at home on Christmas Day and birthdays. It would be a mistake to think that he always took after-dinner speaking as a very serious business: in December 1887, he writes to Sir Henry Acland, after a City dinner—'I said nothing about Plumbing, even though I knew nothing about it: for Thorne Thorne was at the dinner, so I begged the Master to give him 'Sanitary Science,' and to let me have 'Technical Education,' on which it was easy to be indefinite and emphatic. But, indeed, if I had thought of lead-coffins, I think I could not have resisted the speaking of them after so long and ample a dinner as we had.'

An old friend, his colleague on the Senate of the University of London, writes:—

The late Mr. Justice Denman once said to me that he was surprized at the excellence of physicians and surgeons as speakers, compared with his own profession; and mentioned Gull, Savory, and Paget, as examples. I once heard, at a dinner of the Royal Society, the late Lord Coleridge, Mr.

Lowell, then American Ambassador, Sir James Paget, and Mr. Huxley, all speak on the same evening; and the general opinion put Lowell first and Paget next.

His attitude and action were simple and almost tame in beginning a speech: sentence after sentence came out almost as it seemed involuntarily, but each contained a thought clearly expressed, each carried on the impression made by the last, each seemed to interest the speaker as well as his hearers, until he became animated by their increasing interest and pleasure, and brought out the main point with precision and effect. Then he would add to or elaborate it just enough to make sure of its being understood, and before passing on to the next subject would often pause and seem to ponder as he spoke, until of a sudden he looked up as if something had just struck him, made his next point with unfailing success, and sat down quickly after, leaving the audience surprized to find how short, how excellent, how complete was the speech.

I remember a speech at a dinner of the Alpine Club. He followed another visitor who had made a response in the worst House of Commons manner, and with politics dragged in. He began by modestly excusing himself from knowledge of the Alps by the shortness of his holidays in early manhood, the indocility of the nerves and muscles in old age, and the fact of his having spent his boyhood at Yarmouth, in a country 'not exactly mountainous.' 'Ah, but,' he continued, 'there are beauties on a Norfolk broad as well as on an Alpine glacier'—and then he described the sky, the water, the clouds, the colour, the wildfowl, the whole scene in such graphic language that the occupants who crowded the tables hung upon his words, and after a pause of surprize overwhelmed him with applause.

For great occasions, as when he presided at the dinners in aid of the Literary Fund, the Dental Hospital, or the Great Ormond Street Hospital, he made himself, by long preparation, perfect. Men remember, especially, his Hunterian oration—the clear unfaltering delivery, the orderly development of the theme, the delicacy of the light and shade; and the stately, faultless peroration.

ELEMENTAL PATHOLOGY.

Four passages in this Cambridge address, that are admirable examples of his method of teaching, are (1) his general statement of the subject; (2) his account of the

decay of leaves; (3) his account of galls; (4) his account of 'tree-tumours.'

1.

Every pathologist must have felt that the greatest difficulty in his study is in the manifold complexity of the body in which it is pursued. The living human body is, surely, the most complex mass of matter in the known world. In composition, it surpasses the highest powers of chemical analysis; in mechanism, it is as far beyond the calculations of the physicist; its structures are but dimly seen with even the most perfect microscope; all the known forces of nature are constantly and coincidently at work within it; through circulating blood and a nervous system every part is in swift communication with all the rest; and it includes the apparatus of a mind from whose influence no portion of its matter is distantly removed. And in this body the pathologist has to study, not that which is fixed, orderly, and natural, but that which is in disorder and unsettled. May we not, therefore, hold that among all the sciences of observation, human pathology has, in the very nature of its subject-matter, the greatest difficulties to contend with?

I have long and often felt that, in these difficulties, we might gain help from studying the consequences of injury and disease in the structures of plants. For although these, too, are complex, minute and hard to analyse, yet they are less so than are the structures of any but the lowest animals; and, which is most important, the processes in them are not subject to the influence of a nervous system, or of a common nutritive fluid distributed from a central organ and quickly carrying to every part materials derived from all the rest. . . . Though some of the properties of vegetable structures, such as are shown in their subjection to the influence of anæsthetics, their movements in relation to light, and the various groupings of their colouring particles, indicate a likeness to the properties of simple nervous structures; and though, through communicating minutest channels, every portion of a plant may be regarded as in continuous relation with all the rest; yet these small degrees of likeness can scarcely detract from the great contrast between plants and animals in the having, and the not having, nervous systems and circulating bloods.

2.

The atrophies with degeneration are very numerous; but I will take, for illustration, only that group which we may see

beginning all around us in the decay and fall of leaves. This decay is their senile degeneration. It is marked chiefly by their changes of colour—the changes to which we owe the characteristic beauties of our autumn scenery. These are accompanied by changes of texture, shown in the dryness and brittleness of the leaves, and by changes of chemical composition; but I will refer only to the changes of colour. And observe that these indicate decay, not death. They do not occur when fresh leaves are quickly killed, as in hot water, or when they are pressed and dried for a herbarium.

Among many things to be observed in the changes of colour, let me first ask you to note their usual symmetry. One of the characteristics of mere degenerations, as we see them in old age, is that they are symmetrical. I hardly need cite instances; many of us may study them in ourselves or one another. Symmetrically we become, equally on right and on left, bald, or grey, or wrinkled, or dusky with dark pigment in our epidermis and harsh-skinned with thickening and hardening of its cells. And we know that, as a rule, arteries become symmetrically fatty and calcareous; and that very commonly joints are symmetrically affected with the arthritis of old age; and so on. Now, similarly, the rule in leaves is that, in so far as they are symmetrical in shape and structure, so are the changes of colour which mark their decay or degeneration. ('In so far,' for the symmetry of living things is not mechanical; it is artistic, in the divine perfection of art).[1] You may find, indeed, very many exceptions to the rule; for it cannot be observed in leaves which have been unequally expanded, or whose several parts have not been equally exposed to heat and light, or in which parts have been killed or injured. Many accidents may hinder the observance of a rule of symmetry; but the observance cannot be an accident; and, if you will pick-up leaves enough, and look well at them, you will see that the general rule of symmetry in the changes of decay is as evident as is the similar rule in our own symmetrical diseases and degenerations. . . .

Let me now point out another of the lessons which may be read in the decaying leaves; for, really, the pathologist may find in them as many as the moralist and the poet have found.

[1] This sentence was put as a note when the address was published. He often spoke of the imperfect symmetry of faces that had perfect beauty; especially, the 'St. Mary of Egypt' in the Dresden Gallery: and he used to quote what Lord Leighton told him, that 'nobody's face is absolutely symmetrical, except some stupid society beauties.'

The leaves, I have said, are decaying, not dead: and their fall is due to other degenerative yet truly vital changes. Dead leaves do not similarly fall. If a branch have been killed before autumn, you may often see its dead and withered leaves hanging dry and withered all the winter through; and often, when leaves are yellow and withered in their last decay, they hang quivering and spinning, ready to fall, yet waiting. Each leaf is literally hanging on a thread; and at last, by a rougher wind, or a drop of rain, or some chance-violence, the thread is broken, and the leaf falls.

This breaking of the thread is preceded by degenerative changes in the structures both of the leaf-stalk and of the stem, adjacent to their juncture or articulation. . . . At their beginning and maturity, the structures of the leaf-stalk and the stem or twig on which it rests are continuous. There may be some external mark of distinction; but within there is strict continuity; the epidermis, parenchyma, fibres and sap-vessels are alike continuous. But, in preparation for the fall, changes ensue in the adjacent parts of both leaf-stalk and stem. In both, alike and equally, the cells multiply by partition; and those most nearly adjacent change, by a process of degeneration, into cork-cells, dry, brown, and air-holding. Then, as these degenerative changes advance from opposite directions towards the plane of junction between leaf and stem or twig, they meet, and, at their place of meeting, an intermediate layer, or rather two layers, of cells die and become scale-like and part asunder; and now the leaf is ready to fall. It hangs only on the dried thread of fibres and vessels which pass into it from the stem; and the stem is protected by its layers of cork and withered cells from the invasion of parasites and insects.

It would be hard to find a more admirable instance of processes adjacent, coincident, concurrent to a common end, yet independent. We have many of the kind in our pathology, but none more evident, or more within reach of complete study, as of vital processes tending to one end, but not guided from one centre; concurrent, but not concatenate; as independent as are the works of the several bees that make one honeycomb. And thus we may learn from the falling leaves a lesson against thinking that, when we see concurrent morbid processes, we must always expect to find some centre from which all are guided. It is not to be doubted that in organisms such as ours, in which the work is more divided according to its kind and more distributed to appropriate organs, more is subjected to

regulation by central organs, and the working of each part is more influenced by that of all the rest; yet it is not probable that, in any instance, the law is abrogated according to which each elemental structure lives its own life in a method determined by its own inherent properties. There is no principle in pathology more important than this: let the falling leaves remind us of it.

And yet one lesson more. That thread on which for a time the falling leaf hangs quivering—that thin bundle of fibres and vessels connecting it with the stem—is regarded as a development from simpler structures. Fibres and vessels are 'higher' structures; so much higher, that the relation between the Vasculares and Cellulares in plants may match in importance with that between the Vertebrata and the Invertebrata in animals. But mark this instance of anomaly in our language. In the elevation from the lowly cellular state to the higher dignity of fibres and vessels, there is, indeed, an instance of that development which makes fit for membership in a higher economy; that is, an economy more nearly like our own. But in the attaining of this fitness there is loss of vital power. There is no such activity of organic life in the vessels and fibres of wood or bark as there is in the cells around them; they are comparatively unchanging; they cannot multiply; they cannot repair their own injuries; cannot protect themselves; cannot even degenerate as the fading leaf-substance around them does (for even to degenerate needs vital power); they can only die, and the dead thread on which the decaying leaf hangs cannot dispart itself; it must be broken by some alien force. In the taking of higher form, the cells seem to have spent their power of forming.

Now we have in ourselves similar instances of degenerations which we call developments. When cartilage becomes bone we usually say that it is developed; but this is only because it becomes fitter for a share in a higher condition of our economy. The man is 'higher' than the child, and therefore we are ready to speak of everything as ennobled if it contributes to his manliness. But, in respect of texture and self-activity in vital process, in the activity which can work with even a distant supply of blood, cartilage is better than bone; and the change into bone partakes of the nature of a calcareous degeneration; in general utility there is development, in self-activity there is degeneration. And this anomaly of words is found, not without some confusion of thought, in parts of our pathology. We speak of rickets as a hindered or

arrested development of bones, and so, in respect of purpose and utility, it is; but, in respect of elemental tissue-life, it is rather an arrested degeneracy. You may study such anomalies of terms in many instances in plants. Let me suggest a thesis for the D.Sc. There are such things as green roses: show the analogies between a green rose and a rickety child.

3.

Of all morbid processes in plants, none, I think, are so suggestive as are those produced by parasites. . . . Besides the hundreds of different true galls, there are still more hundreds of changes of structure in leaves and stems and roots, all produced by the irritant secretions of insects, and all such as may justly be ascribed to processes of inflammation. In some, as in the 'curl' of the leaves of the white-thorn, you find thickening of leaves which are lifted, rolled, or curled into chambers, which serve for defence of the aphides or other insects; in some, the thickened and distorted clusters of leaves, in buds or on twigs, roll up and are mutually fastened, so as to form the walls of similar defensive lodgings; in some cases, leaves become swollen as with a kind of œdema; in some, their layers separate as if with blistering; or leaves, or stems, or fruits, or clusters of flowers, buds, or roots, produce variously shaped and variously constructed growths of cellular parenchymatous tissue and cork, and, more sparingly, of woody tissue or of cells whose thick walls become as hard as wood.

I think we may regard the whole of these as being such as, in our pathology, we should call inflammatory hypertrophies or hyperplasiæ. They all show a rapid increase of lowly organised structures, by derivation from, and in continuity with, those pre-existing. There is, as in the products of our inflammations, a general likeness among these new structures, whatever be the part of the plant from which they are derived, and all bear a general likeness to the structures formed after injuries of actively growing parts. In the morbid growths formed by these new structures, the deflection from the natural shape and construction of the part, in continuity with which they have grown, is often not complete; they often retain marks of characteristic normal forms, and sometimes acquire marks of natural variation from the species. Moreover, all these morbid growths have their origin in what may justly be called 'irritation' of the part on which they grow; and in all of them, I think, we may note signs of degeneracy from natural

conditions, either in the absence of stomata or similar structures, or in the presence of the red, or yellow, or other colours commonly noticed in decay. . . .

I will not be tempted to speak long, but I beg you to think long, of the marvellous facts of natural adjustment which we have here, in this intense example of the *sic vos non vobis*. Here are the bare facts. Each species of these parasitic insects can compel some part of a plant into such disease as shall supply good food, or well-built and well-placed lodging, or both, for itself or for its eggs and larvæ, or even for part of the life of its complete offspring. Each insect selects, by instinct, the very part of the plant which is adapted to its purpose. The provision made at the cost of the plant is exactly adapted in quality to the welfare of the insect or its offspring, and in quantity as well: for both the lodging and the food are made sufficient for any necessary time—for days or weeks, often for many months; in some instances, for two or even three years. Nay, more than this, a gall, of which the growth has been provoked by the virus of one insect, may be fit for the food and lodging of another, which, when all seems complete, can penetrate the gall-cavity, and there, as with theft or murder, obtain food and lodging perfectly suited to itself or its progeny. And the whole process in the plant, though it be one of disease and, in a sense, unnatural, is yet so regular, so constant and specific, that the form and other characters of each gall or other morbid product are, usually, as constant and characteristic as are those of the insect itself, and the differences among the galls are at least as great as those among the insects. Is there, in all the range of natural history, a more marvellous group of facts than may here be studied? If you would like to work-out a problem in evolution, find how it has come to be a part of the ordinary economy of nature that a gall-insect compels some part of a plant to grow in a manner which, while injurious to the plant, becomes useful to one insect not yet born, and to another who will, in due time, invade the gall and kill and feed upon its occupant, and then may itself be invaded and eaten by a third.

4.

The growths in plants which may, I think, be deemed most nearly like to our tumours, are those which are called exostoses, knaurs, or wens. They may, indeed, be regarded as only prominent examples of that disorderly growth of adventitious buds which produces the various strange and beautiful knots and

veins in ornamental woods; but they are too like tumours for me to pass them by. You may find plenty of them on the trunks of the beech, hornbeam, ash, birch, holly, and cedar. The best specimens appear as ovate or nearly spherical masses of hard wood partly covered with bark, which is reflected on them from the contiguous branch of the trunk on which they rest. They range from a few lines to many inches in diameter, and are attached sometimes broadly, sometimes by short narrow pedicles continuous with the wood of the tree. Some are without pedicles and lie as free encapsuled masses in the growing wood.

In many of these conditions, there is a very strong resemblance between these growths and some of the bony exostoses after which they are named. Especially when one breaks them off the trunk of the beech, or the holly, or cedar, and sees their pedicle of attachment and the bark, like integument and periosteum, continued over them, one cannot but compare them with the narrow-based ivory-exostoses of the skull or the pedicled exostoses which are common on the femur and humerus, or with the sessile fibroid tumours.

On section, they show themselves formed of very hard wood; and their pedicles appear as cylinders of wood passing from their centres into continuity with the normal wood of the trunk. Through these pedicles, while they last, the exostoses probably obtain some of their materials for growth; when detached, they wholly subsist and increase on materials derived from the cambium spread out over them. In this continued growth, when encapsuled, they resemble the typical tumours of our pathology more than do any other morbid growths on plants; and they may continue to grow so long as nutritive material is supplied to them.

Now, the history of these growths is very suggestive to us. They are derived from buds, which remain, as Trécul says, in a sort of lethargic state, as 'sleeping eyes,' for several years, and then become active, and form either a little branch or a *loupe* or exostosis, which, in its increase, will project more and more beneath the bark. Surely, they may thus confirm that theory of tumours which regards those whose structure does not differ widely from the natural structures as growths derived from portions of germinal substance remaining, though one knows not why, for years 'lethargic,' and then becoming active, growing in their own method, and subsisting on materials derived from the living parts around them.

1881.

Next to 1871, 1881 was the most eventful year of his life at Harewood Place. The lesser events of the year were as follows—On Jan. 3rd, he was elected an Honorary Fellow of the Academy of Surgery of Philadelphia; on Feb. 10th, he was made a Governor of St. Bartholomew's Hospital; he writes, 'I was to-day admitted a Governor of St. Bartholomew's, after a kind of honorary election. It was a strange sensation; especially when I could bring back some memory of my earliest times of being in the Great Hall: and I made the contrast with my student-days the sharper by going with S—— to Birch's and standing luncheon off Real Turtle and a little Punch.' In June, he retired from the General Medical Council. In October, he was the Conservative students' candidate for the Lord Rectorship of Aberdeen University, but was defeated by Prof. Bain; his defeat was partly due to his favouring the Conjoint Scheme of examinations.[1] In November, he was appointed on the Hospitals Commission; on Nov. 11th, he was elected an Honorary Fellow of the Medical Society of London; and, on Dec. 11th, an Honorary Member of the Reale Accademia di Medicina di Roma.

The great events of 1881 were his Presidency of the International Medical Congress, in August: and, in November, a severe illness, which compelled him to spend part of the winter at Nice. He had broncho-pneumonia, with hæmoptysis; and, though he came back from Nice strong and well again, this illness seems to mark his first move toward old age.

The Presidency of the International Medical Congress was the highest of all his honours. Two years had been spent in preparation for the colossal work and play of one

[1] The contest was 'wholly non-political,' but the students got good sport out of it; rival processions in the streets, and diverse caricatures, and a fight between the blue flag and the red in the quadrangle of Marischal College. One caricature represented the birth, baptism, and death of the Conjoint Scheme; and declared it to be 'a poor thing, unworthy of its father.' The British Medical Journal, *Nov. 19th*, says of the election 'It cannot be doubted that Sir James Paget lost a large number of votes through his supposed or actual advocacy of a conjoint board. As usual, the Aberdeen students have sifted the matter to the bottom, and their verdict has been given in a way by no means to be misunderstood, against the conjoint board scheme and the additional imposition of fees for obtaining a medical or surgical qualification.'

week; and the notices, sent all over the world, numbered 120,000. The following account of the Congress has been written by Sir William MacCormac, who was Honorary Secretary-General :—

At the meeting of the sixth International Medical Congress, which took place in Amsterdam in 1878, it was decided to hold the next triennial meeting in England in 1881. London was naturally selected as the most fitting place; and a Provisional Committee was formed, consisting of Sir James Paget, Sir William Jenner, Sir William Gull, Sir Risdon Bennett, Prof. Lister, Dr. Matthews Duncan, Sir Prescott Hewett, Mr. Erichsen, and others. The choice of President was their first concern, and this fell on Paget; while Prof. Lister was invited to act as Honorary Secretary-General. On consideration, however, he determined to decline the task, and thereupon the Committee invited Mr. MacCormac, who on accepting appointed Mr. G. H. Makins as his principal Secretary.

A large General Committee, comprising all the chief medical men in the United Kingdom, was formed; an Executive Committee was chosen, to do the work of organisation and general control; and a Reception Committee, to make all local arrangements and to provide for our foreign guests. Sir Risdon Bennett, the President of the Royal College of Physicians, an excellent business man, was nominated Chairman of the first Committee, and Sir Prescott Hewett that of the second; while Mr. Bowman undertook the duties of Treasurer.

It may be of interest to recall for a moment the circumstances under which the London Congress was initiated. The first Congress was held in Paris, and could not be considered a notable success; and the subsequent ones at Vienna Brussels, Florence, and Amsterdam were, comparatively speaking, neither very large nor very important. I was assured by some that a similar success, or rather want of success, would probably attend the London meeting: it was predicted that very few foreigners would come, forty or fifty at the most liberal computation. However, from the start, all were determined that the Congress in London should be worthy of the occasion, and of the country.

The members of Committee attended with the utmost regularity. I do not suppose Sir James Paget missed a single meeting during the two years of the preparation for the great

event. I remember well how often, and how strongly, he insisted that the Congress should be firstly and chiefly for the purposes of true scientific work, and for the advancement of our profession; that this should be our watch-word; that the organisation of social gatherings and entertainments should be relegated to a quite secondary place. Yet, all this notwithstanding, these entertainments grew almost spontaneously, on a magnificent scale, and both public and private hospitality was splendid and profuse. There can be no doubt that the high standard which, as Chief of the organization, Sir James Paget proclaimed, did much to animate every individual unit with a similar desire, and was one of the chief reasons, perhaps the chiefest reason, of the unquestioned success which made the Congress of London such a memorable scientific occasion.

On the opening day, Aug. 3rd, 1881, he delivered the Inaugural Address before an audience, the like of which had never been seen before. Over three thousand medical men were present; and of these as many as 1,097 came from America, France, Germany, all the other countries of Europe, the Colonies, and India. At this meeting, among many distinguished persons, there were present H.R.H. the Prince of Wales, H.I.H. the Crown Prince of Germany (afterwards the Emperor Frederick), the Archbishop of York, the Cardinal Archbishop of Westminster, the Bishop of London, Pasteur, Virchow, Koch, Langenbeck, Charcot, Volckmann and other celebrities too numerous to mention. Truly it was a great assembly; and Sir James Paget presided over it as probably no other man in our profession could have done. I need not characterise the beauty of diction and harmony of phrase, or the grace and eloquence of the remarkable oration that he delivered. It was simply perfect, from whatever point of view it might be regarded: and, although he accomplished much further work during his well-filled life, yet in his Presidency over this remarkable Congress—the greatest and most important, and I may add the most successful meeting of the International Medical Congress which has ever taken place, Sir James Paget may I think be regarded as having attained the zenith of his fame; and he received without stint the sympathetic admiration of the world of medicine. The London Congress, by its importance and brilliance, both scientific and social, fairly eclipsed all those which had preceded it; and, in the opinion of those most competent to judge, it has not been surpassed by any which have followed.

Some portions of this Inaugural Address must be recalled here :—

My admiration is moved, not only by the number and total power of the minds which are here, but by their diversity; a diversity in which I believe they fairly represent the whole of those who are engaged in the cultivation of our science. For here are minds representing the distinctive characters of all the most gifted and most educated nations; characters still distinctly national, in spite of the constantly increasing intercourse of the nations. And from many of these nations we have both elder and younger men; thoughtful men and practical; men of fact and men of imagination; some confident, some sceptic; various, also, in education, in purpose and mode of study, in disposition and in power. And scarcely less various are the places and all the circumstances in which those who are here have collected and have been using their knowledge. For I think that our calling is pre-eminent in its range of opportunities for scientific study. It is not only that the pure science of human life may match with the largest of the natural sciences in the complexity of its subject-matter; not only that the living human body is, in both its material and its indwelling forces, the most complex thing yet known; but that in our practical duties this most complex thing is presented to us in an almost infinite multiformity. For in practice we are occupied, not with a type and pattern of the human nature, but with all its varieties in all classes of men, of every age and every occupation, in all climates and all social states; we have to study men singly and in multitudes, in poverty and in wealth, in wise and unwise living, in health and all the varieties of disease; and we have to learn, or at least to try to learn, the results of all these conditions of life while, in successive generations and in the mingling of families, they are heaped together, confused, and always changing. . . . .

It is with minds as with living bodies. One of their chief powers is in their self-adjustment to the varying conditions in which they have to live. Generally, those species are the strongest and most abiding that can thrive in the widest range of climate and of food. And, of all the races of men, they are the mightiest and most noble who are, or by self-adjustment can become, most fit for all the new conditions of existence in which by various changes they may be placed. These are they who prosper in great changes of their social state; who, in successive generations, grow stronger by the production of a

population so various that some are fitted to each of all the conditions of material and mode of life which they can discover or invent. These are most prosperous in the highest civilization; thees whom Nature adapts to the products of their own arts. Or, among other groups, the mightiest are those who are strong alike on land and sea; who can explore and colonise, and in every climate can replenish the earth and subdue it; and this not by tenacity or mere robustness, but rather by pliancy and the production of varieties fit to abide and increase in all the various conditions of the world around. Now, it is by no distant analogy that we trace the likeness between these, in their successive contests with the material conditions of life, and those who are to succeed in the intellectual strife with the difficulties of science and of art. There must be minds which in variety may match with all the varieties of the subject-matters, and minds which, at once or in swift succession, can be adjusted to all the increasing and changing modes of thought and work. Such are the minds we need; or rather, such are the minds we have; and these in great meetings prove and augment their worth.

Many of us must, for practical life, have a fair acquaintance with many parts of our science, but none can hold it all; and for complete knowledge, or for research, or for safely thinking-out beyond what is known, no one can hope for success unless by limiting himself within the few divisions of the science for which, by nature or by education, he is best fitted. In truth, the fault of specialism is not in narrowness, but in the shallowness and the belief in self-sufficiency with which it is apt to be associated. If the field of any specialty in science be narrow, it can be dug deeply. In science, as in mining, a very narrow shaft, if only it be carried deep enough, may reach the richest stores of wealth and find use for all the appliances of scientific art. . . .

We may read the history of the progress of truth in science as a palæontology. Many things which, as we look far back, appear like errors, monstrous and uncouth creatures, were, in their time, good and useful, as good as possible. They were the lower and less perfect forms of truth which, amid the floods and stifling atmospheres of error, still survived; and, just as each successive condition of the organic world was necessary to the evolution of the next following higher state, so from these were slowly evolved the better forms of truth which we now hold. This thought of the likeness between the progress of scientific truth and the history of organic life may

give us all the better courage in a work which we cannot hope to complete, and in which we see continual and sometimes disheartening change. It is, at least, full of comfort to those of us who are growing old. We that can read in memory the history of half a century might look back with shame and deep regret at the imperfections of our early knowledge, if we might not be sure that we held, and sometimes helped onward, the best things that were, in their time, possible, and that they were necessary steps to the better present, even as the present is to the still better future. Yes—to the far better future; for there is no course of nature more certain than is the upward progress of science. We may seem to move in circles, but they are the circles of a constantly ascending spiral; we may seem to sway from side to side, but it is only as on a steep ascent which must be climbed in zig-zag. . . .

We had better not compete where wealth is the highest evidence of success; we can compete with the world in the nobler ambition of being counted among the learned and the good who strive to make the future better and happier than the past. And to this we shall attain if we will remind ourselves that, as in every pursuit of knowledge there is the charm of novelty, and in every attainment of truth utility, so in every use of it there may be charity. I do not mean only the charity which is in hospitals or in the service of the poor, great as is the privilege of our calling in that we may be its chief ministers; but that wider charity which is practised in a constant sympathy and gentleness, in patience and self-devotion. And it is surely fair to hold that, as in every search for knowledge we may strengthen our intellectual power, so in every practical employment of it we may, if we will, improve our moral nature; we may obey the whole law of Christian love, we may illustrate the highest induction of scientific philanthropy. Let us, then, resolve to devote ourselves to the promotion of the whole science, art, and charity of medicine. Let this resolve be to us as a vow of brotherhood; and may God help us in our work.

The number of members of the Congress was 3,181. The places of meeting were at the University of London, the College of Physicians, the Royal Institution, the Royal Academy, the School of Practical Geology, and the rooms of the Royal Society and of the Linnæan, Chemical, Astronomical, Asiatic, and Antiquarian Societies. A large Museum was arranged in the rooms of the Geological

Society, and a Sanitary Exhibition was organised by the Committee of the Parkes Museum. The work of the Congress was divided under fifteen Sections, and 119 sectional meetings were held: there were also general meetings, at St. James' Hall, with addresses by Prof. Virchow, Prof. Raynaud,[1] Dr. Billings, Prof. Volckmann, M. Pasteur, and Prof. Huxley. The Presidents of Sections were Sir William Gull, Sir John Erichsen, Prof. Longmore, Sir William Flower, Sir Michael Foster, Sir Samuel Wilks, Prof. Fraser, Sir William Bowman, Sir Erasmus Wilson, Sir George Johnson, Sir William Dalby, Dr. McClintock, Sir John Simon, and Mr. Jonathan Hutchinson. There were more than fifty Secretaries of Sections, or of Committees: and they achieved the publication of the Transactions at the end of the year, in four large volumes, containing 2,592 pages, and 180 illustrations. The number of communications was 450, and of speeches 858: the official languages were English, French, and German. The list of papers and debates, demonstrations, and collections of cases and of specimens, recalls men whose names are household words—Pasteur, Lister, Virchow, Charcot, Esmarch, Koch, Donders, Langenbeck, Billings, Osler, Volckmann, Ollier—and includes the widest and most difficult subjects in medicine and surgery, and in the sciences with which they are associated.

The pleasures of this memorable week were, like the work of it, colossal. Receptions at the South Kensington Museum, the Guildhall, and the College of Surgeons: banquets at the Mansion House and elsewhere, dinners and garden-parties and excursions, and, to end all, a vast 'informal' dinner of 1,200 members and their friends at the Crystal Palace, followed by a blaze of fireworks, with huge fire-portraits of the President, Charcot, and Langenbeck. At the last General Meeting, the President spoke the epilogue of the Congress:—

Only a week ago I returned thanks very imperfectly for the honour you conferred on me in electing me your President; and now, with a somewhat lighter heart, I return them for the honour that you give me in saying that I have done the work fairly well; to your satisfaction at least, if not to my own;

[1] This address was written by Prof. Raynaud shortly before his death (June 29th, 1881) and was read by his friend Dr. Féréol.

and yours is that which I had a right most to seek. You have said that I have worked hard for it, and so, indeed, I have, with all those that I have worked with; but, for myself, I declare that every day of great work was a day of greater pleasure. I have not passed a day without the happiness of intellectual intercourse with those whom I have most esteemed, nor one day in which I have not seemed to add many to the 'troops of friends' that 'should' accompany old age.' And now we have to say 'Good-bye.' It is not possible that all the work that we have done should be without good fruit; it is not possible that all the mental force which has been here put forth should be—as no force can be—altogether lost; it is not possible that this mental force should be degraded into any lower form than that which may be represented in the happiness of mankind. But now we must say 'Good-bye'—not I to you, but each of us to all the rest. Good-bye; that is, may all good be with you in the future, and, best of all, the good which comes of doing good.

He kept open house all the week, and three times a day entertained a large party of members of the Congress. The house from morning to night was in a whirl of excitement, but it never lost its feeling of home. The incessant hospitality, the confusion of tongues, the coming and going of all the masters of medicine and surgery with their disciples, the meeting of H.R.H. the Prince of Wales and H.I.H. the Crown Prince of Germany with Darwin, Pasteur, Virchow, Huxley, Tyndall, and other great personages—all these festivities were still 'at home'; he could not easily imagine hospitality anywhere else; and the house, somehow, got through the work.[1]

[1] My mother writes of the Inaugural Meeting—*Aug. 3rd.* 'Now another great Congress-event is over: for us, the greatest: your dear father's address, and a more beautiful one I think he never gave. When he read it to me I liked it much, but there were certain little peculiar gentlenesses and certain marked features peculiar to himself that I missed rather. To-day these all seemed added, and he told me he had left out a great deal and materially altered the other parts—and a greater treat I have not often had. He was very tired, but as usual never referred to any notes, never hesitated. The Hall literally was brimful in every part, every gallery, and a most striking assemblage it was. Then we came home, and in due time the two Princes arrived to luncheon. All lost their hearts to the Crown Prince, and no wonder—he is splendid, and I had quite a long talk with him. He at last said to me "You ought to get these great men, whom it is a great pleasure to meet, to sign their names in a book": and there we have a good many, and hope to get the rest. Yesterday we had 32 at breakfast, and that is a tiring beginning of the day.' One of his

His holiday, in a village near Chelmsford, that his sons in London might now and again get a day in the country, refreshed him: but in November his health broke down, and the occurrence of hæmoptysis warned him that he must not work through the winter in London. On Nov. 26th, my mother writes—

I am no Stoic, but God has ever been so very gracious to us that we may well trust all will soon be well again with our dear one. Tom Smith comes, and evidently is full of hope it will be so. You see, he is so apt to overtax his strength when he begins to get about, that the doctors are obliged to keep him away from all work. He asked Sir William to-day if he might not go to the meeting of the Royal Commission this afternoon!

On December 9th he went to Nice, and was away till Jan. 19th, 1882. His letters from Nice are put by themselves: they are surely some of the happiest letters that ever came from the Riviera.

Letters to George Paget. 1881.

1. *Jan. 11th.*—I thank you heartily for your good wishes on my birthday. Thank God, it is thus far a very happy one, with more blessings and more health than in the middle of my life I should have thought it possible that I should have, even if I should live to be more than 60. So nearly all my happiness is derived from those I love that I may earnestly, though it may seem selfishly, wish you all as much of the blessings of life as I myself enjoy. *May 2nd.*—Let me congratulate you at once and most heartily on the good news which I have just now heard. This election to the Fellowship[1] is as admirable an honour as could be won; an admirable proof of the respect and esteem which the good work and the wisdom of your long life in Cambridge have won for you. We have lived to the time in which the judgment of juniors may be even more prized than that of seniors used to be, and I hope you may live yet very long to enjoy the clear evidence of your juniors' decision.

2. *Baddow Hall, near Chelmsford. Aug. 13th.*—We were

family, after the Inaugural Meeting, asked him for the manuscript of his address; but he would not let it be kept, 'lest it should make me vain,' he said; and tore it up at once.

[1] His brother was elected this year to a Professorial Fellowship at Caius College, under the new University statutes.

all very sorry for your absence (from the Congress-dinner at the Crystal Palace). It was capital fun, 1,200 dining at once in the same room, and the fireworks such as were enough to surprise one as much in old age as the Yarmouth Vauxhall did in childhood. All ended well, and, as I look back at the Congress more calmly than I looked at it during its work and play, I cannot doubt that much real good will come of it.

Letters to his Family. 1881.

1. To F. P. *May 29th.*—I hope you have not disturbed any of your plans in the thought that I might come to Oxford. I was nearly sure, when you were here, that I should be hindered; and the difficulty increased till, by Friday, it was clear that I must not leave for a day, and I wrote to the Master. I dare not leave some cases—including that of poor Dr. Haas, who is still very gravely ill. Perhaps, it was and is well for my own sake that I could not come, for I have rarely been so tired as I was last night, after nearly finishing a very heavy week's work by being for more than 3 hours under examination at the Medical Acts Commission. But if you chance to see Dr. Jowett it may be good to tell him (as I did) that these disappointments in plans for Sunday-excursions are common with me—not to say habitual. Now, I may thank God for a quiet Sunday, in peace, at home. . . . At least, I have had reason to be glad that I was not absent on pleasure. If I had been, and had found out all the unhappiness and neglect of duty which I should have had to ascribe to my absence, I should have been utterly miserable: it would have been unpardonable, a source of life-long shame and regret.

2. To C. T. *June 23rd.*—We had our (preliminary) Congress Conversazione last night, and about 200 came. With the help of a brilliantly-lighted tent on the leads we made a good display, and had plenty of space and fresh air. The whole affair was well approved as a good start for the Congress. We dined to-day with the Knowles's, and met, among others, Cardinal Manning, with his nearly saintly but not strong face and graceful but not brilliant or very profound conversation. He was very agreeable but (I won't have any more buts)—and what else I might write I will keep for stories: for it is already far into the early hours.

3. To C. T. *Baddow Hall, Sept. 1st.*—It seems a shame that I should have been so long without writing to you, even during the idleness of this vacation: but you know my belief—

that none do anything but those who have too much to do —and I am a good instance that it is often true. We are not yet clear of the thoughts about the Congress, nor I quite clear of its work: for MacCormac insists that the three volumes of Transactions ought to be published in six months, and I give him what help I can. It will be excellent, if we can show not only that we had the biggest scientific Congress ever held, but that the biggest work of the kind was finished in less time than is usual for even the smallest. MacCormac is certainly the most stirring resolute man of work that I have had to do with: and one of the most business-like: and yet he is a real Irishman.

4. To C. T. *Hôtel Meurice, Paris: on the way to Nice. Dec. 9th.*—I cannot help seeing that you are all most kindly anxious for me, and full of wishes that I should soon be well again. I have very little to tell-of: for these luxuries of courier—the excellent da Nicola—and carriages reserved, and apartments ordered, remove all chances of adventures such as one used to have to talk-of—all risks of boxes missing and of packages disordered at the douane, and of vile demands for *pour-boires* and disputes with drivers. They were annoyances, but they made the pleasures seem the brighter; and I should miss them with some regret, even if the missing did not remind me of my illness, and that all these cares are taken from me who used to enjoy the taking care of myself and others. . . . I shall never cease to regret that my illness—though it was not more than half-due to my fault, for the rest of the fault was my grandfather's—so shortened and dimmed your holiday.

Letters from Nice. Dec. 1881–*Jan.* 1882.

1. To S. P. 19 *Promenade des Anglais, Dec. 13th.*—. . . . The open windows, and the hot sunshine pouring in—too hot to sit in it—and the Mediterranean bright blue in front of us, and so clear that, as its waves roll in, one sees right through their curves and they look quite transparent and jade-coloured. And I have carnations from our little garden in my button-hole; and our bouquet at breakfast, bought for half a franc, had abundant roses and violets and orange-flowers. I am half-inclined to say nothing about it, for it is enough to make you unhappily envious in hearing of it: but it shall be an additional reason for making me wish you to have, after May, the jolliest holiday in your life. *Temp.* (not mine, but of our balcony at 11 *a.m.*) 68° to 70°. *Dec. 21st.*—This will be

the first Christmas in which we have been apart, and I am very sorry to be the cause of our separation: but I could not help it: it was not, I think, entirely my own fault; and it is a great mercy that, though apart, we may all be happy and very grateful for all the abundance of comfort which we are allowed to enjoy. I wish you could be here: but you cannot: let me comfort you in your work by assuring you that it was only through a vast quantity of the like of it that I came to be able to have this help to health. And, indeed, as I look back, there are few things of the kind for which I might have worked more than for the ability to have comfort like this, for your mother as well as myself, without serious harm or loss to any of you. . . . I would write more, but that I owe many letters—and, with the bright blue Mediterranean to look at, it is impossible to get on so fast as when one faces only the mud-coloured front of Harewood House.

2. To C. T. *Dec.* 22*nd.*—Thank God, I am still steadily getting better. I am taking about 16 tonics a minute—a curative dose with every breath of this lovely air. It will seem a strange Christmas to us here; the people do not 'keep it' much; it will look like a common Sunday, *i.e.* like a rather dashing very idle weekday. But I hope that we may have our own imitation of home, as near as we can make one, and our happy thoughts of all from whom we are for a while parted: and we will drink your good healths, with the old wishes. We make short excursions now, and find great beauties of scenery, and startling combinations of the chief features of places that are far apart. In some parts of the town, one looks along streets at mountains that remind one of Innsbruck: and from the hills around, covered with cypress and olive-trees, the view over the town recalls Florence from Fiesole; or in another direction a distant view of snow-peaks might be thought in Switzerland or the Dolomite country: and there are broad sandy and stony plains with scattered trees and palms and aloes near half-ruined houses, which might almost have served for sketches that one has seen of Palestine or parts of Syria. *Dec.* 29*th.*—I have to tell of the weather, if only because one ought to tell of all causes of gratitude. Even the Niçois now call it beautiful: for in all this week we have not seen a cloud, except those which made the Christmas sun-rise and sun-set glorious. . . . I send you for a New Year's card a sketch of our Christmas-cake: but it is too feeble, too little decorated: I have only rough pencils, too rough to show fine sugar-work, and I have no colours. Imagine the finest sugar-

lace and fine colours, dolphins, doves, and rock-work: and 2 feet of elevation: such was our cake. We cut it yesterday at 5 o'clock tea: the de Reuters were here, and Dr. West, and Mr. Cross and his sister, and we had a very pleasant time and some good music. The Crosses dined with us, and then we had more music: she playing admirably, and your mother and Mary better. It was our first piece of gaiety. On Thursday we went to Cannes, where I found, or rather called-on, several friends—Quain, Curling, Newton, and Lord Acton—and had not time to see as many more. *Jan. 4th.*—We went yesterday to a little place a few miles hence along the coast, Eza. We went by rail to the Eza station; between which and the town the traffic is probably not more than that of about 10 passengers per week—for the town, with 600 inhabitants, is on a cliff about 1,200 feet high, completely invisible from the station, and only accessible from it by means of one of the roughest zig-zag mule-paths. Up this we went, through some of the loveliest scenes, rough ruddy and grey cliffs and débris thickly wooded with olives, holm-oaks, pines, laurels, and pepper-trees, and with low shrubs and many plants already in flower, including abundance of marjoram. It was a splendid climb, in full sunshine during half the way, then all in shade; and in great part of the way the sea was brilliantly bounding the lower part of a broad ravine. The town itself is the strangest we have seen anywhere: a close-packed cluster of houses high and blank-walled, built on no other plan than that of the chance-faces and surfaces of the rocks on which it is placed. It has a church, and the ruins of a great tower: but not one shop (unless at a window marked *Débit de Tabac*) and not one street or passage more than 8 yards long: in one of these Mary asked a woman for the 'principal street,' and the answer was 'C'est celui-ci, Madame.' Let it tell of my health that all this did not tire me, thank God. I am astonished at the grandeur of the scenery all around: it seems to have been overlooked or forgotten by the people who talk of the beauty of the climate of the Riviera, as if that were the only thing worth coming for.

3. To S. P. *Jan.* 1, 1882.—I report myself to you medically, as still gaining strength, and as having no sign of having been ill, except in the continuance of my cough. Normal pulse, breathing, temperature, &c.—everything in Foster's. So, make you my prognosis. We have had a complete change of weather: a heavy gale, E.S.E. with storms of rain (of course in Poplar the initials will be familiar to you). Though dull without, we are bright here within, having no less than 7 large

bouquets, all duly arranged in concentric rings and limitary paper-lace-work. They are from 12 to 18 inches in diameter, and contain 100 roses, 72 bunches of violets, and 56 bunches of orange-flowers, with about 20 camellias. They are New Year's gifts. *Jan.* 12*th.*—I enclose a piece of vegetable physiology—a sprig of oak on which all the leaves are dead and yet hold fast. This is what one sees on large numbers of oaks and hazels here. The leaves are all brown, dry and apparently quite dead, as dead as those which in England would fall at the slightest jar: yet they remain. In England one would suppose that the whole tree or branch is dead: but it is not so here; the wood and whole substance of the sprig which I send you were fresh and living. I do not know why or how this is; but I think there is at least one tree in England in which the same thing occurs, and on which one may see dead leaves hanging in mid-winter.

4. To C. T. *Jan.* 11*th.*—I shall not write much, for I have had so many kind letters on my birthday that I might spend the day in trying to answer them completely—they deserve that I should do so, and none more than your's, which arrived first and has first and greatest claim for thanks. Indeed, I send more and better than I can tell: for you are among those who, more than anything else, make my life happy and make me wish to live. I do not forget that I am growing old, and am already much older than it used to seem at all likely that I ever should be: and with increasing years one's power of recovery from illness becomes less complete; but I should be very grateful, and try to be, for the great gain which I have had here. Still, it is nearly time to be home: the great happiness you all wish me is there: especially, the happiness of being near you all, and so more consciously one among you all.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

VI

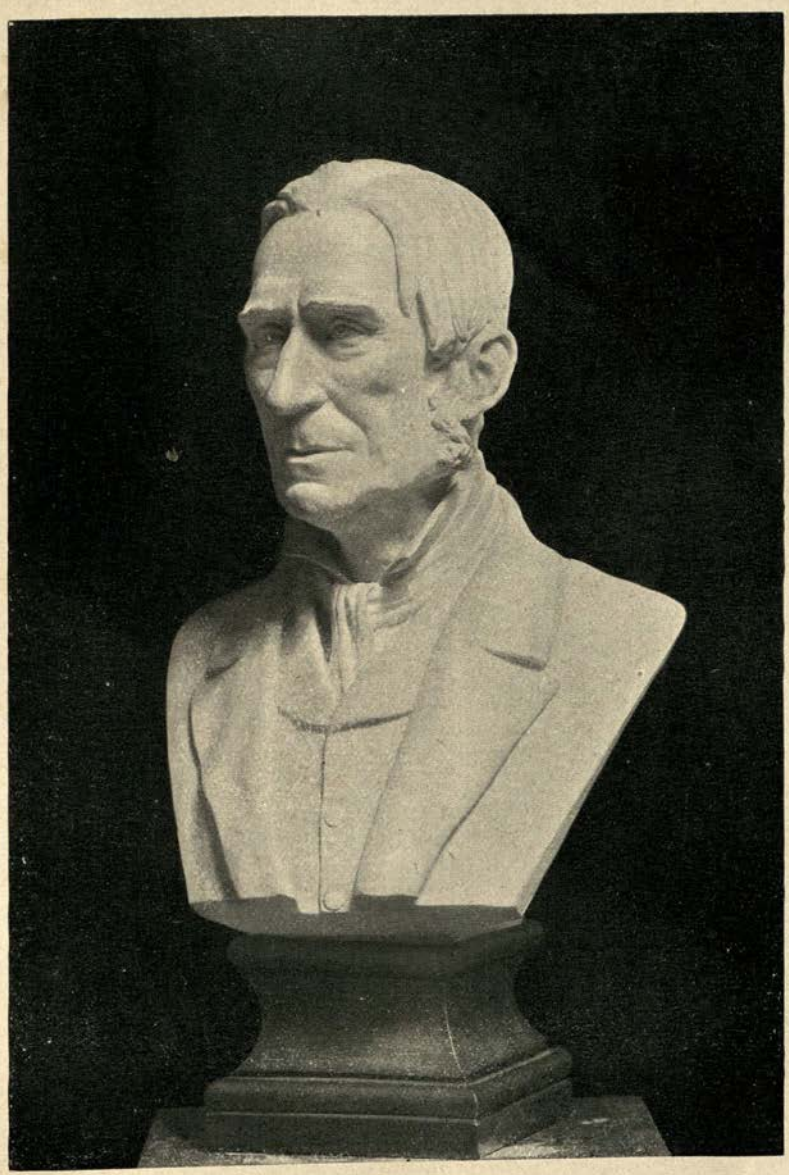
1 *HAREWOOD PLACE, HANOVER SQUARE.* 1882-1888.

1882.

So soon as he came back from the Riviera, he took up all his work, and was present at every meeting of the Hospitals Commission. This year, at the Tercentenary Festival of the University of Würzburg, the honorary degree of Doctor of Medicine was bestowed on him. It was a year of many honours: he was elected an honorary Member of the Royal Society of Sciences of Upsala, of the Massachusetts Medical Society, of the Académie Royale de Médecine de Belgique, of the Aberdeen Medico-Chirurgical Society, and of the Physiological Society.

On June 13th, he communicated to the Medico-Chirurgical Society of London his notes on seven additional cases of osteitis deformans. In August, he attended the annual meeting of the British Medical Association at Worcester: it was the Jubilee-year of the Association; and he had been at the meeting at Worcester in 1849, when Sir Charles Hastings was President. At the festival-dinner of the meeting, he proposed success to the Association; and said—

> There has never been anything like a recession from the great principles on which it started. It has been constant in its steady advance; constant in its usefulness; constant in the influence that it has exercised upon the profession; constant, best of all, in the promotion of knowledge and good feeling amongst all the members of our calling. . . .
>
> I hold that our great anxiety, our great strife, should be, to be a self-governed profession; to know our own wants, and not to go to others to help us; to find out the remedies for ourselves; to find out by careful, patient controversy, and mutual concessions, how we may, without any external help, bring about the results which the best and the largest number



SIR JAMES PAGET
(From a Bust by Sir Edgar Boehm, 1885)

of us wish for. Let us be, as all highly cultivated persons should be, self-governed. None can know so well as ourselves our need; none can know so well the remedy we require. It tells of feebleness, of cowardice, and want of self-reliance when we want to go to any Parliament living to help us.

His summer-holiday this year was at Crayford in Kent; in September, he went with his brother for a fortnight to Avignon, Nîmes, and Arles. In November, he was appointed one of the electors to the newly instituted Professorship of Pathology at Cambridge: of Professor Roy, who was elected, he writes, 'He is certainly one of the very best, if not the very best, of our scientific pathologists; and they are becoming the most prominent of all the scientific groups of our time.'

On December 13th, before an audience of nearly 500, he gave the first Bradshawe Lecture at the College of Surgeons, 'On some Rare and New Diseases.' [1] He begins by speaking of rare cases, as different from rare diseases: then he says—

Because of their number and variety, I must pass by rare cases, and will speak only of some rare diseases—that is, of some diseases which are rarely seen and yet occur in a sufficient number of cases, and with sufficient uniformity, and sufficient difference from other diseases, to permit of their being described in general terms, and to justify their being called by distinctive names. And of these, again, for they are numerous and various, I shall select only that group which seems most attractive—the group of those, namely, of which there seems reason enough for believing, first, that they were, lately, new diseases and have become more frequent; and, secondly, that they are due mainly to morbid conditions changing and combining in transmission from parent to offspring. . . . However much of what seems to be new we may justly ascribe to our previous oversight of what was old, there yet seems to be evidence enough that new diseases are in course of evolution,

[1] He writes to his brother of this lecture, and of their holiday together in September, 'I am very doubtful about the lecture: it will be too much like mere speculation in pathology: but I have long had the belief in my mind, and have persuaded myself there is something in it, and that we ought to study the variations of types in diseases more than we do. . . . It is a great blessing that age does not more gravely diminish our health, and does not in the least diminish our love: rather, I feel that in this year—thanks in part to our happy tour together—love has increased.'

and that some of the rare diseases of which I have to speak are the earliest instances of the new.

As instances of new diseases, he gives Charcot's disease, osteitis deformans, and gouty phlebitis:—

I think that in all these facts there is enough, not indeed to prove, but to justify the belief, that we have here examples of diseases, which have appeared in this country for the first time within the last century, and which have since become sufficiently frequent, and acquired sufficiently constant and distinctive characters, to be described in general terms and called by new names. Let me repeat: these are not diseases hard to be discerned; they are so well marked, so distressing, so long-enduring, and both during life and after death so large and distinct in all their characters, that it seems impossible that, unless they were very much rarer than they are now, they could have been overlooked.

He goes on to speak of the probability that these diseases are the results of morbid conditions changing and combining in transmission: that gouty phlebitis may be due to a convergence of inherited dispositions both to a modified form of gout and to some condition of the veins rendering them especially sensitive to gouty inflammation; that osteitis deformans, with its likenesses or relationships to other diseases, may indicate a combination, in definite proportions, of transmitted dispositions to those diseases—a combination which has become possible by changes of the type of one or more of them:—

It will be better for us if we study, in pathology as in natural history, varieties as much as species; changes as well as the more stable forms. Consider the difficulty of maintaining a 'breed' in any of the varieties of the species domesticated or cultivated by us, in horses or dogs, in pigeons, or in seedling plants. Hybrids and mongrels must be even more common among diseases than among species and varieties. There are few worse habits in practice than that of commonly saying of a case 'It is all gout.' We might as well say of any Englishman that he is all Norman, or all Anglo-Saxon, or all Celt. We may, indeed, sometimes see persons who appear to be as types of races unchanged in many centuries but in practice we had better study every man as, for better for worse, a composite of many ancestors.

All these variations in diseases should be studied as Darwin studied the variations of species. Let me be clear in saying, as Darwin studied; for in the pursuit of new knowledge he may be a model to all, as he has been to me so far as I could imitate him. He, I know, would have studied these things, not by deduction, as from a law exactly formulated and from which he could trace the course of every change, but by a most careful collection of facts; facts to be seen in specimens and read in full records and stored in museums, and by a study as complete for every case as if no law of evolution had ever been discovered.

Letters to his Family, 1882.

1. To C. T. *Feb.* 13*th.*—I am holding-out well, thank God, and find no reason to regret the coming home (from the Riviera) sooner than some advised. Indeed, as I try to balance all the happinesses and comforts and works at home against all that can be found abroad, I can still be sure that with fair health I can enjoy the former at least five times as long as the latter, and would choose them alone, if I could not have them both in some fair proportion. *March* 1*st.*—I have been reading and, on the whole, admiring 'John Inglesant'—that strange mixture of fervid passionate romance and calm religious feeling. He must be a very rare man who wrote it: or, at least, he must have one very rare piece in him.

2. To S. P. *June* 18*th.*—I must write to you: for I have horridly missed you to-day, and have often felt strangely alone without you. I had to walk alone to my only case this morning, and to walk alone to Whitehall, and now after prayers I feel that all but myself will soon go to bed, and I shall not have you, either awake or asleep, close by. This writing is the nearest to the pleasure that I can have. I went to Luke yesterday,[1] by underground to Aldgate, then walking to No. 399: amused by all the variety of shops and scenery, made sad and bewildered in thinking of the lives, present and future, of all the multitude of souls that cannot die. . . I have heard of an excellent man wishing to study acid dyspepsia experimentally, with himself as subject; and with a stomach often so imperturbable that his observations cannot be steadily continued. A few nights ago, in despair, he had red-herring, porter, and toasted cheese—much of each: and all in vain.

[1] His third son, now vicar of St. Pancras, was at this time in charge of the Christ Church Mission, Poplar, and lived in the East India Dock Road.

3. To F. P. *Avignon Sept. 24th.*—At Arles, we saw an amphitheatre in comparison with which that at Verona is almost insignificant, and from which, on a great Saracen-tower built on its highest wall, we could see, in complete panorama, miles beyond miles of the rich valley of the Rhone, with vines and mulberries, olive and cypress trees, maize and meadow land, and on the hills half-ruined castles and some churches; then, within a hundred yards of this, a theatre which must have been as richly decorated with marble pillars and statues of the purest Greek art as the French Opera-house is decorated with gilding; and, close by, a Museum with the rarest sculptures both Pagan and Christian of the 2nd, 3rd and 4th centuries; and the Church of St. Trophimus with most lovely cloisters, in which nearly all the pillars were those collected from the ruins of the theatre, and all are of marble, some with Corinthian capitals, some, having lost these, now bearing well-carved Christian devices. Then, at Tarascon, we were on the spot where there is at least fair reason to believe that Martha the sister of Lazarus is buried. An admirable simple monument has been put over it with a recumbent figure, and a tablet inscribed *Sollicita non turbata.* As one looked at it, in the dimly lighted crypt, and saw poor women praying and kissing the feet and hands of the statue, one was at once content to be credulous. And here (Avignon) we have the ruins of the most violent and vile of the times of Papal secular dominion—castle, towers, prisons, walls such as one could scarcely find in the strongest fortified towns.

4. To F. P. *In the train from Liverpool to London, Oct. 15th.*—My visit to Oxford could not be: the cases to be seen were such as I could not reasonably or gently put aside. So I am losing great pleasure, and travelling in discomfort. The discomfort is not so great; for I am alone and can try to think, and everything I see outside suggests many thoughts; *e.g.* the valley of the Mersey in its contrast with the valley of the Rhone; Runcorn, grey almost to blackness, all mud below, all smoke above, lines of low red houses and huge chimneys, railways at every curve, heaps of refuse where lawns and trees should be—all this in contrast with Avignon as we saw it only three weeks ago, or Canterbury a week later. They look like the habitations of different races; and, indeed, there may be few animals other than man whose homes are more different. And yet they work together to the one end, and even now are mutually helpful; for as the surgeon whom I have been meeting, a very able man, Dr. Jameson, said of St. Helen's,

where he lives—'We minister to others the sweetness and light which we do not ourselves possess; we make more and better soap and plate-glass than are made in any other town in the Kingdom.'

1883.

On January 17th, 1883, at a meeting of the Metropolitan Counties branch of the British Medical Association, Sir George Humphry's proposals for the Collective Investigation of Disease were brought under consideration; and addresses were given on the subject by Sir William Gull and Sir James Paget. His address on this occasion recalls many of his ways of thought—his dislike of politics, his desire that the facts learned in general practice should not be wasted, and his reverence for Darwin's example:—

The list of questions, which is published on each of the papers sent out by the Committee, indicates that we are not ashamed to confess our doubts on some of the most important things that come before us; that we are prepared to stand confessedly ignorant on many points upon which we are supposed to have complete and final knowledge. I think that, in common with most scientific men, we may boast that this is rather rare; that there are large groups of men, and those much esteemed, who rarely express doubt on anything, and thereby command the assent of those who listen to them. Without expressing the smallest preference for one side more than the other, I would say that this is best to be found among politicians, in whose speeches we almost entirely miss the words which are most familiar to ourselves—'perhaps,' 'possibly,' 'I rather think,' 'I would venture to suggest.' I have looked with much curiosity, not for the sake of acquiring political knowledge, but for the sake of comparing the political and the scientific mind, to see if in some of the best and most renowned speeches I could find one expression of the kind. Not one is there. . . .

If I may impute a fault to those who are admirable in all the ordinary work of their life, I would suggest how large a quantity of knowledge lies scattered, and lost to the scientific world, in the charge of those who are in large practice, and who record nothing: those who have known families for generations, and who can, of their own knowledge, and not on

the fallacious and often very false reports of relatives and friends, declare what has been prevalent in this and that household. . . .

Darwin had the rare power of taking the common things that other men waste, and out of them making the grandest material of scientific work. So that it is vain to say, in any branch of practice, 'I have no opportunity for scientific enquiry; I cannot investigate this; I can contribute nothing to that which I see the scientific members of the profession are doing.' It requires merely the opportunity of a practice in the country, and the mind and resolution of Darwin, to bring great pathological conclusions out of the most ordinary facts of daily life in general practice.

In April, he was unanimously elected Vice-Chancellor of the University of London, on the death of Sir George Jessel. This great honour was very pleasant to him, both for its own sake, and because it brought him into nearer friendship with Lord Derby, Lord Herschell, Lord Avebury, Sir Edward Fry, Sir Henry Roscoe, Sir Joshua Fitch, Mr. Milman, and many other men whom he admired. Three of his friends have written the following accounts of this part of his life: they are able to speak with authority of his work, and with the memory of many years of his friendship.

Sir Edward Fry writes:—

In 1885 I had taken part in the proceedings of the Convocation of the University of London, in reference to the question whether the utility of the body could not be increased by a change in its constitution; and in December of that year I was appointed by the Crown a member of the Senate of the University. I believe that this was due to the wish of Sir James Paget that I should be a member of that body—with especial reference to the contemplated changes in its constitution. For he not only discussed the matter with me before I joined the Senate, but encouraged me to bring the whole matter on for discussion: and from that time forward, till he resigned the office of Vice-Chancellor, I was in frequent, sometimes very frequent intercourse with him on the various questions which emerged from week to week in the consideration of the matter. On the question whether the Senate of the University should oppose the petition of the two Royal Medical Colleges for their constitution into a medical university—a question that at one

time seemed of more importance than it has turned out in the course of events—the negative was carried only by his casting-vote as Vice-Chancellor presiding at the meeting.

No one could see so much of Sir James Paget as I did for several years and not be struck with several things in him. First perhaps I should put the gentleness and kindliness of his nature. To do the kind thing seemed to come to him by natural suggestion—not as the result of thought or of a sense of duty. I used sometimes to think that he had this virtue to a fault—that he was too willing to accept any excuse put forward by some examiner who appealed about some irregularity in the proceedings in an examination—too unwilling to close a discussion over which he was presiding, lest he should pain some one by cutting him short. I am not sure that I should have trusted Sir James to preside over a Criminal Court. But be that as it may, this gentle and kindly nature was always, as it seemed to me, sweetening his walk amongst men, and it found its natural expression in the courtesy which, mingled with an innate dignity, characterized his manners.

Another thing which was very apparent in Sir James Paget was the openness of his mind and the care with which he studied and thought out any point which came before him. I do not think that he was remarkable for quickness in grasping an idea, or in following the shifting points in a discussion: but he had a calm patience about everything, not disturbed by hurry or noise, which enabled him always to be fully master of a matter before he left it: and he was sure to exercise upon it an unbiassed judgment. For the openness and impartiality of his mind were constant, and were a very fair instance of the best scientific ἦθος. When I speak of his openness of mind, I would not be understood as suggesting that all questions were for him open to discussion. No man could have lived and thought so much as he had done when I first knew him without having many matters settled at least for him: and on the great problems of life Sir James had very settled judgments, and it was impossible to see him much and not feel that a reverent sense of dependence on God, and of our obligations towards Him, was a constant motive in his life.

There was one question which we not unfrequently discussed, and on which we were inclined to differ. I felt and feel very strongly the evils of competitive examinations, especially when carried to the extent they now are. He was inclined to dwell on their advantages, and he put a higher value than I did on the mental exercise involved in getting up a great mass

of information and reproducing it in a lucid form: and he pointed to the barrister, with his brief, and his speech the next morning, as illustrative of the value of the operation. I need not trouble you with telling you how I used to parry this thrust.

I recall to mind a conversation with him, which impressed me much, on the subject of death. He expressed the opinion that death as a natural act is probably not unaccompanied with the kind of sense of ease or satisfaction which generally accompanies such acts: and he said that he had never known (I think he spoke without making any exception) any one who was really afraid of death when it came near.

He was a thorough Englishman and Londoner, though not born in the great city. He was fond of saying that taken all round there was no better climate than the English, and of London he always seemed to me to be very fond, and much inclined to minimize the evil of the fogs and smoke.

It is possible to dwell on this or that feature of a man's character, but how hard, how impossible it is to depict the man: and so with regard to Sir James Paget, though his personality seems to me as vivid as if he were here present, yet I cannot reproduce it for others. I cherish the memory of his friendship as very precious: he always treated me with a confidence that made even matters of business a source of pleasure and makes me look back to him with gratitude. It is sometimes said that friendships are made only in early life: but a happy experience tells me that this is not always true.

Dr. Pye-Smith writes:—

Sir James Paget was appointed a member of the Senate by the Crown in 1860. Though not a graduate of the University, he had been so closely connected with one of the principal medical schools affiliated to it, that his appointment was welcomed by all interested in the development of the medical faculty. At that time the policy of restricting the University from anything except its examining function was in the ascendant. It had been supported by a succession of able men: the Vice-Chancellors, Mr. Grote and Sir George Jessel, the Chancellor Lord Granville, and the member for the University Mr. Lowe (Lord Sherbrooke). Convocation had at that time declared itself in favour of reform, by seeking to gather up again the ties which had formerly united the University with

its Colleges and Schools, and by inviting the collaboration of teachers in the various faculties with the examiners and the committees of the Senate who from time to time recommended changes in the curriculum. The party in power was supported by the graduate members of the Senate, Sir William Gull, Mr. Osler, Mr. Hutton, and by others who had no desire to see the University become a possible rival to other Institutions.

Paget did not take any active part in the discussions on these points for some years: in fact, if he had made up his own mind as to the need of reform, he was too prudent to raise a question which for the time being had been disposed of. He was chiefly useful, as a member of the Committee of the Faculty of Medicine, in influencing the regulations for study and examination, and particularly in establishing the degrees of Bachelor and Master of Surgery.

As Vice-Chancellor, he soon made his influence felt. Punctual and constant in his attendance, cautious and deliberate in his statements, remarkable for his courtesy and tact, he yet showed a clearness of vision and quiet perseverance in the path he thought best chosen which made him as good a Chairman as could be.

When Sir Edward (then Lord Justice) Fry brought forward his scheme for reform of the University, it was moderately but decidedly supported by Sir James Paget, and, after some wavering among older members of the Senate, a good majority approved the proposed reforms. Under the Chancellorship of Lord Granville, numerous conferences with the constituent Colleges, with the Colleges of Physicians and Surgeons, and with the representatives of the London medical schools, were held. The Vice-Chancellor was always present, and often in the chair, ever ready to smooth over ruffled feelings, to reconcile unpractical opposition, and gently to lead the progress of the business in the direction of least resistance.

When he had reached his 80th year, his sense of hearing and his intellectual apprehension showed no signs of decay, and it was with great regret that the writer learnt from Sir James that he intended to resign his office. He was persuaded to continue until Lord Herschell was appointed Chancellor, and the second Royal Commission had been decided on; and then retired at the most opportune time, having seen the process of reconstitution begun, and without any reason to prevent the regret of his colleagues from being universal. No one was more respected and esteemed while in office, no one more lamented when he died.

Lest the strain of eulogy which must predominate in any recollections of Sir James Paget's character and work should seem unnaturally uniform, it may perhaps be added that he appeared sometimes to carry his admirable gentleness, his *mitis sapientia*, to excess. He could not bear to say a word that might inflict even the most trivial annoyance on those who were most careless of it themselves. One occasion illustrated this weakness, if such it were. On a committee of the Senate, it had long been felt that some change in certain official positions was necessary, and after due conference it was agreed that a member of the Committee should when the time came propose the change generally desired. The proposal was duly made as arranged beforehand, and all looked to Sir James to support it. But he kept his eyes fixed on the papers before him, and made no sign: there was nothing to be said, but it was felt that on that occasion unwillingness to give pain had been carried as far as possible without merging into weakness.

Another friend, Sir Joshua Fitch, writes of him, with special reference to two important matters that came before the Senate, one in 1878, the other in 1892:—

Sir James Paget was the seventh Vice-Chancellor since the foundation of the University in 1836. His predecessors were Sir John W. Lubbock, Sir John Lefevre, Mr. Grote, Sir Edward Ryan, Lord Avebury, and Sir George Jessel, the Master of the Rolls, who died in 1883. The members of the Senate could not fail to be struck with the contrast between the decisive and masterful chairmanship of Sir George Jessel, whose reputation as one of the strongest judges on the Equity bench has never been questioned, and the gentle and considerate supervision of the affairs of the University by his successor.

Though he was at the head of his own profession, his intellectual distinction and his wide literary and social sympathies prevented him from assuming the character of a mere specialist; and on the few public occasions on which it fell to his lot to take the place of the Chancellor, his addresses were marked by refinement and literary finish, as well as by full acquaintance with detail, and an evident desire for the expansion of the University in new directions. On the Senate, his modesty and patience led him sometimes to be a little too tolerant of irrelevant speech, and to listen with scrupulous deference to the opinions of others, especially younger men

who had given special attention to subjects and plans which lay outside his own range of experience.

For example, in 1878 one or two of us urged the Senate to consider how those of our students who were intending to become schoolmasters might be encouraged, by way of post-graduate study, to become better acquainted with the art, theory, and history of education. It was contended that in order to improve the quality of teaching and to raise it to the rank of a liberal profession, it was desirable that its practitioners should not be empirics merely, but should study systematically the most approved methods of imparting knowledge, and the principles which underlie all right method. To this end, it was suggested that the University should put forth a syllabus of studies in educational philosophy and history, should hold an annual examination, and award a special Teacher's diploma to the successful candidates. The proposal was new; and not wholly attractive to those who were much influenced by academic traditions. But at that time Cambridge and the Universities of Edinburgh and St. Andrews were founding Lectureships on Pedagogy, with appropriate examinations, and our own University was asked to take an active share—so far as its constitution and means allowed—in providing for the better training and equipment of teachers in secondary and higher schools. Sir James was at first doubtful; but after reading and hearing the arguments in favour of the project, he wrote to me expressing his great interest in it, and adding, in reference to an article on the subject, 'It has made me sure that there is, in many places, need of more education in teaching; and nearly sure that it would be very useful to institute degrees in teaching, if some good method of practical examination of the candidates for such degrees could be devised. I hope I may be able to hear the whole matter discussed at the next meeting of the Senate.' Once convinced that the experiment was worth trying, he took a sympathetic and helpful part in the subsequent discussions. The measure was duly adopted and a scheme of examinations duly formulated; and the practice of prescribing a course and giving a special diploma in the art and science of teaching has since been followed by Oxford, by the Victoria and Welsh Universities, and by the great provincial Colleges which have lately been created in the principal industrial towns.

His attitude in relation to the great movement which has recently (in 1900) transformed and re-organized the University was very characteristic. During the first twenty years follow-

ing the foundation of the University, it received, as candidates for degrees, no others than those who were certified to be students in some one of the affiliated Colleges. But experience proved that the working of this restriction was unsatisfactory; and in 1858 a new Charter was obtained, empowering the Senate to admit to examination, on the same conditions, all candidates, whether they had been taught in a college or not. From that time, the number of graduates rapidly increased. But the complete detachment of the examining authority from the teachers and professors who sent up their pupils was found to be attended with grave inconvenience. As early as 1881 a motion was made in the Senate, affirming that it would be expedient to establish closer relations with the teaching bodies, and recommending that a Committee should be appointed to consider and report on the possibility of attaining this end, either by the creation of representative Boards of Studies or otherwise. But Sir George Jessel promptly ruled that any such measure would be *ultra vires* and inconsistent with the terms of the Charter; and the proposal was therefore negatived. When however the subject came on again for consideration, in 1892, the new Vice-Chancellor was disposed to treat the matter in a serious and sympathetic spirit; and in a letter to me, in which he makes arrangements with a view to a meeting for the discussion of the subject, he cautiously says—'Though I am sure that a much more intimate association with teaching bodies is very desirable, I cannot feel nearly sure as to the best method by which this may be gained. Let me at least hope that you will attend the meeting and advise us what to do. If you think that we might usefully consider the subject together before the meeting, I will call on you.' . . .

From that time he followed carefully all the movements which both within and without the Senate and Convocation were designed to enlarge the scope of the University, and to make it influential in co-ordinating the various academic agencies of the metropolis, and in encouraging learning and teaching by other means than by mere examination. These movements resulted in 1898 in the enactment by Parliament of a statute which completely re-constructed the University. But up to the date of his resignation in 1895 he had never ceased to place his services, and the weight of his high authority, on the side of those who sought on the one hand to conserve what was best in the traditions and past work of the University, and on the other to adapt it to the new work and changed circumstances of the future.

He leaves behind him in the Senate the memory of a prudent counsellor, and a gracious and conciliatory Chairman, one who cared much for the interests of the profession of which he was so distinguished an ornament, but who cared still more for the wider interests of learning and science, and for the consecration of all knowledge to high and noble uses.

Among the home-events of this year (1883) was the death of the old nurse of the family: 'The house is very sad,' he writes, 'with the good nurse and friend lying dead where she made our lives so happy.' His summer-holiday was at Leatherhead; afterward, he and my mother went to Devonshire and Cornwall. He writes home—

Penzance, Sept. 18th.—Thus far, all that one has seen of the country in Cornwall, unless at the very sea-side, has the shabby look characteristic of mining districts; as if the same people did not care for both that which is on the earth and that which is in it—granite fences, granite cottages, granite village streets are not lovely; and lovely things will not grow on or near them. Even their ruins are not picturesque. But the rather dull road brought us to all the grandeur of the rocks. You know them: but we had never before seen any so grand or beautiful or so deeply impressive; never before, the wonder of masses of granite so piled-up and grouped as they might be—perhaps were—by the force of some mighty explosion. *Blachford, Ivybridge, Sept. 22nd.*—We are here enjoying an entirely new state of life, in that we are staying with friends: for, except in having once stayed a Saturday-to-Monday at Sir William Bovill's, your mother and I have never done this before: nor did I ever spend more than one whole day in any one's house but my own, since my early boyhood. It is very pleasant here: for both Lord and Lady Blachford are full of knowledge as well as of kindness. . . . We have had quiet easy travelling, and good food (bar tea) and generally good hotels; and we are at least as much refreshed as by anything abroad, and have been learning things of which I ought to have been ashamed to be ignorant. But, if God grant us a happy meeting, then we may tell our adventures and compare them. So may it be.

1884.

During the early months of this year, he added to all his other work the office of a Vice-President of the International Health Exhibition. It was a new experience for him, to take part in the management of a great exhibition; and he enjoyed the novelty of it, but was disheartened by the immense quantity of advertisement in every line of business. His duties as Vice-President did not go beyond attendance at the meetings of the Executive Council: only, on one occasion, at an official dinner at Mr. Ernest Hart's house, he had to take the place of the President, the Duke of Buckingham and Chandos—'I tried to do duty as a Juke last night,' he writes, 'but I fear it was bitterly felt by some that I was only a Bart.' The hard work came over the preparation of an address that he gave at the Albert Hall, at the reception of the International Juries of the Exhibition by H.R.H. the Prince of Wales, on June 18th. This address, on the relation between national health and national work, and on the quantity of work lost to the nation through sickness and early death, gave him infinite trouble; and he never was content with it. With the help of Mr. Sutton, Actuary to the Registry of Friendly Societies, he had estimated the time 'off work' of several hundred thousands of working men and women, and of men in the Navy, the Army, and the Metropolitan Police; and the national loss of work from hopeless ill-health, insanity, or early death, and from the disease and death of children. He gives the following tables, based on the sick-lists of the Manchester Unity of Odd Fellows, with a membership of more than 300,000:—

1. MALES.

Ages.	Number of Males; Census of 1881 (England and Wales).	Weeks' Sickness per annum, according to experience of Manchester Unity.	Average Sickness per individual per annum, in weeks.
15–20 . . .	1,268 269	844,428	·666
20–25 . . .	1,112,354	820,183	·737
25–45 . . .	3,239,432	3,224,134	·995
45–65 . . .	1,755,819	4,803,760	2·736
All ages from 15–65 .	7,375,874	9,692,505	1·314

2. FEMALES.

Ages.	Number of Females; Census of 1881.	Weeks' Sickness per annum, according to experience of Manchester Unity.	Average Sickness per individual per annum, in weeks.
15–20 . . .	1,278,963	851,701	·666
20–25 . . .	1,215,872	896,685	·737
25–45 . . .	3,494,782	3,476,146	·995
45–65 . . .	1,951,713	5,368,229	2·751
All ages from 15–65 .	7,941,330	10,592,761	1·334

'I think,' he says, 'that we cannot escape from the reasons to believe that we lose in England and Wales, every year, in consequence of sickness, 20,000,000 of weeks' work; or, say, as much work as 20,000,000 of healthy people would do in a week.' He does not stop to consider that much of this work, and of the payment of it, is not really lost, but only changes hands; that one man's loss is another man's gain: to him, loss of work was like waste of food, a dead loss:—

Try to think of it in money. Rather more than half of this work is lost by those whom the Registrar-General names the domestic, the agricultural, and the industrial classes. These are rather more than seven millions and a half in number, and they lose about 11,000,000 of weeks; say, for easy reckoning, at a pound a week; and here is a loss of £11,000,000 sterling from what should be the annual wealth of the country. For the other classes, who are estimated as losing the other 9,000,000 weeks' work, it would be hard and unfair to make a guess in any known coin; for these include our great merchants, our judges and lawyers, our clergy and medical men, our statesmen and chief legislators: they include our poets, and writers of all kinds, musicians, painters, and philosophers.

He goes on to speak of the mortality among children;[1] and says:—

It is indeed held, I believe, by some that these things should not be counted as losses: that we have a surplus of

[1] On May 17th, he writes to one of his sons, 'I want you to tell me the real meaning of "replenish the earth"—*i.e.* the very meaning in the original. I may wish to quote it in a speech which I must make at the Health Exhibition—as against those who would make light of the deaths of

population, and that really the deaths of children, though they may be the subjects of a sentimental sorrow, cannot reasonably be regretted. I cannot bring myself to admit that such a thing should even be argued. I have lived long in the work of a profession which holds that wherever there is human life it must be preserved; made happy, if that can be; but in any case, if possible, preserved; and no amount of expediency shall ever make me believe that this is wrong. Indeed, I am rather ashamed—even for the purpose that I have in view—to use so low an argument as that of expediency in favour of the saving of health and of life. I am ashamed of making money appear as a motive for doing things for which sufficient motives might be found in charity and sympathy and the happiness of using useful knowledge; but it seems certain that these are not yet enough for all that should be done for the promotion of the national health; therefore, it seems well to add to them any motives that are not dishonourable; and so I add this, that we lose largely not only in happiness but in wealth by the deaths of these poor children.

At the end of his address, he enumerates the chief gains, in the preservation of national health, of the last thirty years; and describes what he means by perfect health, in a man or in a nation:—

Any one who has studied the sources of disease during the last thirty years can tell how and where it has been diminished. There is less from intemperance, less from immorality; we have better, cheaper, and more various food; far more and cheaper clothing; far more and healthier recreations. We have, on the whole, better houses and better drains; better water and air, and better ways of using them. The care and skill with which the sick are treated in hospitals, infirmaries, and, even, in private houses, are far greater than they were; the improvement and extension of nursing are more than can be described; the care which the rich bestow on the poor, whom they visit in their own homes, is every day saving health and life; and, even more effectual than any of these, is the work done by the medical officers of health and all the sanitary authorities now active and influential in every part of the kingdom. . . .

He should not be deemed thoroughly healthy who is made better or worse, more or less fit for work, by every change of weather or of food; nor he who, in order that he may do his

children. I want to say or imply that we have no right to limit the one half of the command "Be fruitful and multiply," till the other half is fulfilled by the complete occupation of the earth.'

work, is bound to exact rules of living. It is good to observe rules, and to many they are absolutely necessary; but it is better to need very few besides those of moderation and cleanliness, and, observing these, to be able and willing to live and work hard in the widest variations of food, air, clothing, and all the other sustenances of life. And this, which is a sign of the best personal health, is essential to the best national health. For, in a great nation, distributed among its people there should be powers suited to the greatest possible variety of work. No form or depth of knowledge should be beyond the attainment of some among them; no art should be beyond its reach; it should be excellent in every form of work, mental or muscular. And, that its various powers may have free exercise and influence in the world, it must have, besides, distributed among its people, abilities to live healthily wherever work must be or can be done.

On April 17th, 1884, at the Tercentenary Festival of the University of Edinburgh, he received the degree of LL.D. of the University.

In August, he went to Copenhagen for the Eighth International Medical Congress, and was the guest of his old friend Professor Hannover. From Copenhagen to Berlin, St. Petersburg, Moscow, Kiew, Warsaw, Berlin again, Dresden, and so home: the furthest and most memorable of all his holidays. He had the power of immediate enjoyment of every kind of holiday, no matter how overworked he was up to the last moment in London. On Aug. 3rd, he writes, 'I have never been so utterly tired by work: my brains are useless: I feel as if rest were the only thing needed, and the one thing (D.V.) that can set me right'—but he lost his weariness so soon as he left London behind him. At Copenhagen, he received a welcome equal to that given to Pasteur and to Virchow. The beauty of the city, and the light-hearted splendid hospitality of the Congress, charmed him: and he had the honour of addressing the Inaugural Meeting, of proposing 'Denmark' at the President's banquet, and of speaking at the great banquet given by the Municipality. His letters home tell all the pleasure and fatigue of this week, and the wonder of his first sight of Russian cities; they are put here by themselves, after other letters of this year.

To George Paget during an illness. 1884.

April 4th.—I can almost be sure of what I should advise—namely, that you should not neglect to take food and wine in due time or even at once. I was never attacked unless want of food, fatigue, and chill concurred to make me ill; and I seemed to need 'support' as much for the remedy of the first as rest and warmth for that of the second. Remember what the old doctor said when he heard that I had a kind of gouty pneumonia, a sort of 'incomplete gout': 'He had better have got it *in toto*.'

(This letter recalls not only his deep and constant thankfulness for 'the blessing of good food and wine,' but also his firm belief in the value of wine. He writes to his brother, Nov. 3rd, 1882, 'Thank God, I am very well, and feeling fit for all the work I have to do. I have taken to one glass of port—white port—after dinner every day, and am nearly sure it does me good.' Nearly a year later, Sept. 25th, 1883, he writes, 'Let me suggest that you should take rather more wine than you did when we were last together. I think I can be sure that I am the better for a glass of port each day after dinner: and when one is in danger, at or near 70, of either gout or degeneracy, the latter had better be delayed even though it be at some risk of bringing-in the former.')

Letters to his Family. 1884.

1. To C. T.—I am ashamed to write you a short letter, but I have at least 20 to write this night-morning. Besides, even a very long one would not tell you all my love. I have not finished Mr. Drummond's book; it is full of good intentions well told: but my impression is that he is rather too apt to think—as often-speakers often do—that the same word must always mean the same thing: as when he speaks of the organic and inorganic Kingdoms, and—as a third—of the Kingdom of God. And his anti-dogmatism is surely very dogmatic. But I will read more of him. *June 20th.* (*Declining an invitation.*)—I have a case that should not be left; and we are now so small a party that I never like to make it less. Besides, I am well and hearty, and am feeling less overworked than at the beginning of the week, before that vile address was given. It gave me more trouble and less pleasure than anything of the kind I ever did: and even now I am suffering from it in the long arrears of work due to it. The 'Healtheries' (as the

slang is) go-on marvellously, and are doing good quietly while giving amusement to thousands and hundreds of thousands. I am learning more of business in them than ever I knew or thought of, and am happily too old to be the worse for it.

2. To F. P. *Oct. 27th.*—I am happy that I was not wrong in what I thought of John Inglesant. It makes the whole story more interesting to think this of him. Something similar used to be thought of Hamlet: but now it is hard to say what, or how many things are thought of him, or will be since —— began to act him and extracts from twenty newspapers are used for puffing him. I am still feeling strangely refreshed by my vacation, and, perhaps, by seeming to see the end of the Exhibition work. It has given me strange experiences: chiefly in seeing how the selfish competitors in life work-out a general good: just as, in nature, the struggles for existence help to bring-in a constantly better. But to learn this on a large scale and in lessons of self-advertisements is not pleasant study.

Letters from Abroad. 1884.

Hannover, Aug. 6th.—This may tell of Hannover and Hildesheim. The first we have enjoyed thoroughly, for it had the charm of being a surprise first, and then of many beauties. We wondered at a town looking so rich and clean and busy, with the costliest of stations and fine public offices and wide streets and open places, and an admirably well-made, well-dressed, and healthy-looking people; and then in the older parts of the town we have found the most picturesque of high-roofed and gabled houses—nearly the whole lengths of some of the shorter streets being made up of them, and among them some of the rarest quaintness and even of rare beauty, especially that in which Leibnitz lived. But, perhaps, it was well that we had seen them before we made our excursion to-day to Hildesheim: for there they are far surpassed. It is a marvellous place, not only for these strange old houses of the 14th and 15th centuries, but a Cathedral with real wonders. Chief among them are the bronze doors between the Galilee (Paradise as they call it) and the interior of the Cathedral itself. Do you remember those of S. Zeno at Verona? These are as large: but their metal-work is not in inlaid plates; they are solid bronze, and the figures on them stand out further than in the deepest of ordinary *alti rilievi*.

Hamburg, Aug. 8th.—This place has a happier union of

beauty and business than, I think, any I have been in. The sunset view from our windows across the broad piece of water, round which the best part of the town is built, was on both our evenings here quite lovely: and not the less so for the number of steamers and little sailing boats going to and fro. And as for business—the docks are about three times as crowded with steam-ships, sailing ships, barges, and craft of all kinds as any of the fullest docks in London. And around them all are the quaintest old many-windowed houses, decaying now, but still very picturesque, with their high-pitched gables and red-tiled roofs. One could spend hours admiring them and wondering about their histories. The Kiel journal is reckoning that 400 Doctors will to-morrow pass through the town on their way to Copenhagen.

Between Hamburg and Copenhagen, Aug. 9th.—The rush for the steamers was awful and ridiculous: there were three instead of the usual one, and all were filled, chiefly with doctors. In the train with us are Spencer Wells and his children, Gamgee, Semon, Kölliker and his son, Esmarch, Kaposi, Schnitzler, Ball; and many, very many, more who look at me and I at them as with a vague belief that we have met before, and probably we did at the last Congress. I find myself described in my first Danish paper as travelling 'med Frue og Søn og Datter'—so it may have been from the Danes that the Norfolk people learned to prefer Darter to Daughter.

Copenhagen, Aug. 10th.—We are quite enjoying ourselves here, in the usually quietest and simplest of houses, but in, now, a swift confusing Congress-life. To-day we had the opening meeting in presence of all the Royal Family—a huge assembly like that in St. James' Hall: and here I had to make a speech from a tribune. Then, this evening there was a great dinner; here too I had to speak, solemnly and very loudly, for there were 300 guests: and the speeches were made during dinner, and the clinkings of glasses and movings of the guests from place to place were most exciting. Virchow spoke in German; Pasteur in French; I in English: we seem to have been selected to represent the Langues on both occasions. The dinner was splendid; admirable food; still better wine; and more signs of sentiment and various talks and confusion than I ever saw. To-morrow, the business of the sections begins: but not only business will go on: for there will be a pathological dinner, and on Thursday a civic one; and on Friday a Presidential one; and with each of these the immense difficulty of trying to remember or even to seem to remember the names

of the many who 'had the pleasure—in 1881.' But I get on and, as far as possible, conceal my ignorance. Still, I *am* very tired, and so, good night. God bless you in all things.

Copenhagen, Aug. 17th.—The work and the pleasures and confusions of this Congress have been at least as great as those in London in 1881. It has been, I fully believe, very useful for its scientific purposes; but these, as in London, have seemed trivial in comparison with the festivities, which have far surpassed any I have ever seen. If it will not look too greedy, let me tell them by the eatings they were all accompanied by:—Saturday, a dinner of 25 here, with many toasts, meats, and wines: Sunday, a dinner of 300 at the Hôtel d'Angleterre, with profusion of food, wine, speeches and music and smoking: Monday, a dinner of 90 at Tivoli, with the same supplies, more rapid and trivial speeches, and much more smoking with coffee in the Gardens: Tuesday, quiet, but at luncheon with the Queen; Wednesday, an excursion to Elsinore, with coffee (served in huge cauldrons and the milk in pails) for about 1,500 to 2,000, and an awful scramble for something to eat, at an hotel at Frederiksborg, for about 1,000; Thursday, a dinner for 1,200, marvellously well served in a huge tent built on purpose, with about 40 separate tables and 150 waiters, and many speeches completely inaudible; and, after all these, an entertainment with music, illuminations, and fireworks at Tivoli; Friday, a dinner of about 25 at the President's, and after it a marvellous reception by the King and the Royal Family, with supper for about 1,200 in a magnificent Hall in the biggest of the Palaces; Saturday, dinner with the King and the Royal Family at their small Bernstorff palace, a charming pleasure at what might be almost called a family party; and after this came a huge conversazione in a great Concert Room in the town with music, speeches, dancing, and supper for at least 1,500. I am ashamed now at such a catalogue of material pleasures: but it may tell how warm-hearted and really jovial the Danish people are, and how liberally hospitable.

Between Hamburg and Lübeck, Aug. 19th.—The landscape is seldom picturesque, though it shows all the charms of land abundantly productive of good food for both man and beast. It is most like the nearly level districts of the richest agricultural parts of Norfolk or Suffolk: with closely hedged-in fields and meadows, rich with wheat and turnips, buck-wheat and good grass, and scattered red-roofed barns and cottages. If I were not in a train, with frequent bitter ear-rending

shrieks, I could fancy myself near my old home in Norfolk; even the flowers in the hedge-rows look like the same.

Berlin, Aug. 20th.—Yesterday we went to Lübeck, and saw the grand Gothic towers and churches, all built in red and black bricks, and grand in elevation and immense height of spires. One of them was marvellously decorated within, with tablets, monuments, portraits and images: and though many of these were in the worst style, with out-hanging legs and arms, grinning faces, wings, and all manner of supposed symbols, yet the general effect was singularly grand. Another, the Cathedral, should have been better, but that its whole interior was swept and white-washed as clean as it could have been in Holland. But here, in a side-chapel, is a Memling of surpassing beauty; larger and even more perfect in skill of colour and design than any of his that I have ever seen. To-day, we saw the interior of Scott's Cathedral at Hamburg—perfect, pure, Gothic, blameless in uniformity of design, and with some of the grandest windows. And, after tea, a long walk in part of this big, bright-shopped, straight-streeted city, where there seemed nothing useless, nothing picturesque, nothing admirable, nothing vile.[1]

Between Berlin and St. Petersburg, Aug. 24th.—We have been travelling about 36 hours, and I think not one of us is tired. The scenery is strangely unattractive. Miles follow miles on a nearly dead level: unless at an extreme distance, we have hardly seen a hill of more than 100 feet high; sometimes, they are miles of meadow and marsh-land; sometimes, of forests of fir and birch: sometimes of low-grown corn and hemp, sometimes of sand-hills and poor thin grass. Of course, in fuller study one would find more variation: but the railway view is curiously monotonous, and nowhere more picturesque than in an average piece of Norfolk or of some agricultural part of Belgium. We have just been enjoying, at a station, more of Russian looks and costume than we had before—a long white-haired old priest, a lady smoking her cigarette while taking her déjeûner, red-shirted porters, fur-capped guards, a boy-soldier of about 10, shabby-looking Tartars—a greater change from other European life and more refreshing than I had expected I should ever have.

St. Petersburg, Aug. 25th.—We have now spent our first day in this vast place; and such a day! We began with

[1] But he writes later, with the utmost delight, of the Greek sculptures and Egyptian antiquities, and of the good open-air music, at Berlin.

seeing the wonderful church of St. Isaac, built in the huge Admiralty Place, which, in due proportion to the general construction of the town, is about as big as 6 Belgrave Squares—6 or 8 or 10. The sides of the Church have porticoes with monolith-columns of granite each about 30 feet high, and there are at least 60 of them—and within, are immense columns of malachite and lapis-lazuli and great mosaic pictures far surpassing any we have ever seen: the immense columns, too, which support the dome, bigger than that of St. Paul's, are all covered with the richest marbles. Besides, we heard and saw Mass and Baptisms; and heard the lovely singing of the male choir, which, only customary here, is as beautiful as even the grandest in England, and more impressive, being more concealed. One has never seen such grandeur of colour in any Church as in this. Then we looked about the town with its vast wide streets, of which few are less than twice as wide as any in London, and its enormous 'Places': and then, coming home for lunch, we found ourselves 'called upon' by Dr. and Mrs. Higginbotham, Dr. Carl Reyher, and Dr. Carrel—who in ceremonial compliment came in full dress and covered with decorations, for he has been physician to three Czars. They were all utterly kind and urgent to be hospitable, and Dr. Reyher carried us off for the day; first to the great art collection, and then to dinner at 'The Isles' . . . a very pleasant good dinner by the river-side at a restaurant, from the window of which we could watch a rare sunset, with deepest crimson-edging of dark clouds—most rare beauty. And after dinner—this in confidence?—we went to Livadia, a kind of Cremorne with illuminations and a small French theatre—and then to Arcadia, a kind of Vauxhall with a Russian theatre, and an Opera and a Choir of Gipsy singers. . . . You may tell Butlin that Prof. Reyher sends him very kind regards, and expects him to be the leader in his time.

Between St. Petersburg and Moscow, Aug. 27th.—To-day, the least busy of our three, we went to the great Church of the Kazan, and then to the still greater of St. Isaac, where we found interest—for it was a high festival, of the Assumption of the Virgin, and people of the middle and lower classes of all kinds and in various costumes were crowding to the Mass. Never since Einsiedeln have I seen a crowd so intensely worshipping, and never have been so impressed with the assurance that the belief in divine help and guidance is, in many, far more nearly a natural instinct or consciousness than an intellectual conviction or any mental condition implying

previous thinking or consideration. For the large majority of these people are untaught and have only learned to pray as they have learned to eat cooked food, or to smoke, or drink spirits: and the readiness to learn seems in each case to indicate a natural aptness or adaptation. (But it is not easy to find right words in a railway train at bed-time.)

Moscow, Aug. 28th.—Everything great or rare or interesting at St. Petersburg is surpassed here, if the splendid picture-gallery and the collection of Greek ornaments and statuettes be excepted—certainly a grander gallery than any I have seen, richer in Raphaels, Rembrandts, Van Dycks, and nearly every Flemish artist's work, than I could have guessed at. But leaving these, all the wonders at St. Petersburg are here surpassed. The splendour of the Churches, the glare of their decorations, the pious customs of the people, the shabby miserable looks, the seeming utter poverty and idleness of many of them, are more than one can describe. But really, the place is past describing. The Kremlin, of which one had a vague notion as of a huge Mosque, is, in fact, a vast space enclosed with turreted and towered walls, like a fortress, nearly two miles in circumference and containing three or more palaces, about 6 Churches, 3 convents, and a great review-ground, and I have not yet seen what besides. Among the Churches are some of the most gorgeous—as one enters such an one, it seems within all gold; for the walls and pillars and roofs are nearly all covered with gorgeous Icons, altars, banners, lamps, and whatever else may look glorious and costly. And of these, less or more grand, there are in Moscow more than 350. Yet the priests are among the least cleanly of the people; none, it is said, respect them; none are taught by them; they are a separate class, mingling with neither higher nor lower. And with all the apparent wealth of the Churches the town in most places looks utterly dirty, ill-paved, unswept; and the majority of the people match well with it. I have never seen contrasts so awful: and the contrast is the more marked because of the rarity of anything that might seem midway between the extremes of grandeur and of misery.

Of all the scenes I have looked at—I mean of all that comprise human work—the most wonderful is the view from the highest tower in the Kremlin. The whole city is within view as one vast panorama; all the hundreds of Churches; the thousands of houses, red-roofed or green-roofed; the vast gardens; the wide river; all make such a scene as one could scarcely dream of, and cannot illustrate by any other—unless it

be to Oxford multiplied 20-fold and made Russian—a sight which it is equally impossible to forget and to remember.

Between Moscow and Kiew, Sept. 2nd.—We have been for the last 14 hours passing through what they call the black land. In contrast with the sandy and gravelly soil which seemed to be in the whole range between Berlin and Moscow, here is a rich-looking soil completely black where it is recently ploughed. Miles after miles of it are covered with buck-wheat, still standing or recently cut; or else are being ploughed or sown for, I suppose, next year's crop. And thus it is in every direction, as far as the eye can reach: and still there are no hills, not even one in the extreme distance: the only variations seem to be that, as we go on, there are changes to more or less of pasture, or of land with patches of rye, or of flax, or of woods of silver birch, or of corn-flowers. It looks as if this land alone, if well cultivated, might yield for all Europe: but it looks also as if there were not nearly people enough for its good culture, and as if those who are in it were content to do no more than plough and sow and gather any how.

It is all in striking contrast with some of the things to be seen in the towns: for instance, the splendour of the Church of the Redeemer, which we saw in Moscow on Sunday—so beautiful and splendid that it makes one feel that the Greek style *can* surpass every other, unless one will hold that beauty in form must be reckoned as *very* far to be preferred before that of colour and material. Within, it is all marble or pictures: and all above, within the domes, is brilliant gold and painting with subjects showing more and more of light till, above all, in the central dome is part of the form of the Father, surrounded with angels so pale and gently coloured that one may think the artist was nearly right in believing that he might try to paint the Very Heaven. The pictures at the base of the dome, and those on the pillars, are so beautiful and so truly sacred that one cannot but think that the modern Russian artists are by far the best in Europe for this use of painting: certainly, one has never seen anything by an English artist, unless it be Millais' Moses, at Mrs. Reiss's, which can fairly be matched with them. Best of all, behind the altar, and hidden from general view, is a Last Supper by Verestchagin, which may really be matched with that at Milan, the great Leonardo. Indeed, if a picture is to show what a scene probably was—or anything like what it was—this may be preferred, for it has an admirable appearance of reality in it without the least diminution of its sacredness. . . . And then we dined, and I should be

ashamed to say at what cost, if I had had anything to do with it. A real Russian dinner—first there was a strange thing called Borsch, a good meat and chicken soup brought in a great earthen pan, and of which each plate contained a heap of small pieces of softly cooked carrot, a slice of tough beef, another of lean ham, a sausage, a laurel-leaf, bits of pine and (I think) some few other things; and with these we were expected to mix a sauce made of slightly sour cream with some strong-smelling essential oil. I never saw or tasted so complex a barbarism of cookery: the soup alone was good enough, the adjuncts ridiculous or nasty. . . . But that may suffice for 'pig's-talk'—for just then we were coming near Kiew, and as we crossed the Dnieper, on a bridge which reminded us of that which we cross to Venice, there was a scene of hills and thick foliage and gilded cupolas as beautiful as any on the Danube. It was quite startling, after the many hundreds of miles that we have traversed without seeing one charm of landscape: we nearly shouted at it. And now I end my letter in Kiew, in a pleasant room, clean as a good ward. All send untold love. God in all things bless you.

Between Kiew and Warsaw, Sept. 4th.—We may well be content to have been without the charms of scenery when we have been able to study such wonders of human life and work as we have found. Our tour has been full of lessons in the most genuine anthropology. Especially, I have thought this in our visits to the two great monasteries, the two greatest in Russia; that of Troitska, near Moscow, and that of Bratski, near Kiew. They are deemed the best of all: but their work seems lamentably poor in comparison with their wealth and power. I do not know what the annual income of either is: but it is sufficient for the maintenance of a large body of monks of several grades, and in their treasuries are idle jewels on mitres, icons, and dresses worth, it is said and is evident, some millions sterling. All these are useless, unused; only shown as curiosities.

At Troitska, there was the usual daily crowd of pilgrims, two or three hundred, chiefly of the poorer peasant-classes and the lower work-people, looking, for the most part, like such as we should call tramps. Just outside the monastery are poor-looking tents and sheds in which they may buy food and little sacred things, and dress, and, I suppose, may rest. The Church in all the parts within sight of the altar was tight-crammed with these poor people and ourselves, all standing, or trying to kneel. Or, some were kissing icons, some pressing to the coffin

of St. ?— that they might kiss a place on the breast exposed through a small hole in the dress; some were buying little votive candles, and some, small loaves from which bits might be cut for the holy bread and the rest be thus made sacred; and some bought holy oil for the cure of everything. I have seen nothing like it since Einsiedeln: but this had altogether a lower look, utterly mindless and thoughtless: it seemed impossible to doubt that any idol would have been similarly worshipped by the same people.

And we saw the monks in their refectory, a fine large hall as big as that of Christ Church. They were about 60, at two side-tables and an upper table, all being served by many unwashed long-haired juniors: digging deep at dishes and each helping himself as if in rivalry: and certainly not one appeared to be listening to the Gospel which was being read— all looked careless, habitually dirty and slovenly, not like a meeting of educated or thoughtful men. And then we saw the feeding of the poor, of whom they have more than 100 attending every day. Of course it was great charity to many of them; but many, we were told, were habitual beggars; and the food, except the good black bread, was of the roughest kind; some kind of soup, served in big bowls from which each ladled-out what he could, none having plates; and then some Kwas, a sort of weak rye-beer, fearful to taste. It was charity in its least gentle form: far less so than would be found in many of our workhouses. All seemed to show what we hear and read everywhere, that with very rare exceptions the clergy of the Russian Greek Church, of whatever kind, neither teach nor take care of the people. Especially they do not teach them: they do not even preach unless on some very strange occasion.

Between Warsaw and Berlin, Sept. 6th.—You ask about Warsaw as if it must have in it some suggestion of romance; and so I may have thought once: but it has none. It has, like the other Russian towns which we have seen, the appearance of extremes in close contact with one another: but the grandeur looks as if forgotten or neglected, and the poverty looks more complète and general; and there is really no beauty of either art or nature. The dirt and shabbiness of the poorer parts of the town, and especially of those in which, chiefly, the Jews live, are worse than any we have ever seen. The whole population seem ugly, unwashed and in rags; the men all dressed alike, in their long, shapeless coats and their peaked caps: the married women with their dirty false hair: and the worst of all is that they appear entirely careless of their state;

not reckless, not distressed; but busy, active, quiet as if in an habitual contentment with what looks utterly vile. It was a hideous sight: and if anything could be dirtier than the people it was their houses and their food, especially their stinking cheese. So, one leaves Warsaw without regret and can always recommend it as the best way out of Russia. The towns look as if there were no Russian middle class: certainly, they are in a very small minority in comparison with the army and officials and the working and begging classes. All that one reads and hears and sees, tells that here is the greatest and not yet successful attempt to make a strong and happy country by the means of a central power governing and guiding everything for a people who have neither the power nor the will to guide themselves.

Dresden, Sept. 9th.—Your favourite Dresden—We heard some excellent music well played at the Café Belvedere: the overture to Leonora, some of Carmen, the dance from Mignon, and the Finale from Tannhäuser. It was very delightful to sit still, merely listening; even the clouds of tobacco-smoke scarcely interfered with the pleasure. We went to the Grüne Gewölbe, and found at least amusement and instruction in some of its gaudy costly ugliness and in its rather fewer beauties. Do you remember the mis-shapen pearls made into chests and stomachs and hideous limbs? It is enough to think hopefully of any people, when one sees that this taste was recovered from. Then came shopping, then table-d'hôte, and now, after coffee and letter-writing, an opera, Jessonda. We had a long study of the Picture Gallery, and a most delightful one—enjoying the Ribera and the Rembrandts and Ostades and Gerard Douws and some even of the Rubens', and finishing with half an hour's quiet sitting before the Madonna. It was as impressive as if one had never seen it or seen it in photographs: the wonder of it is greater than can be borne in memory or told in any imitation; no length of study is enough for it; even when one does not find new beauty in any part of it, the old is constantly becoming more impressive.

1885.

On Jan. 19th, he was elected an Honorary Fellow of the Academy of Medicine in Ireland. On March 23rd, he was elected a Corresponding Member of the Académie des Sciences: he writes of his election, 'Charcot telegraphed this to me yesterday; it is, I think, the highest

distinction of its kind, the 'blue riband' of science; far more honourable than anything I should have thought that I had fairly earned. I must try to be harmlessly proud of it.' M. Pasteur writes, congratulating him—

Paris, le 31 *Mars*, 1885.—Cher confrère et très éminent maître,—J'ai été fort heureux d'entendre la Section de Médecine et de Chirurgie proposer Sir Paget pour faire partie de notre Académie des Sciences à titre de Correspondant. Permettez-moi, en félicitant notre Institut de vous compter au nombre de ses membres, de vous adresser à vous-même mes très sincères compliments. Je puis ajouter que moi-même j'y ai gagné beaucoup. C'est à propos de l'exposé de vos titres que j'ai eu connaissance de l'un de vos ouvrages qui vient d'être traduit en français dans le titre 'Leçons de Clinique Chirurgicale par Sir James Paget,' livre précieux que je me suis empressé d'acquérir et que je lis avec le plus vif intérêt, quoique fort indigne. Je puis du moins profiter de la sincérité parfaite de l'exposition, de la méthode, des réflexions de philosophie pratique de l'auteur, et de l'esprit général de cet ouvrage si instructif, remis en honneur par les travaux de M. le Dr. Verneuil. Cher confrère et très éminent maître, je saisis avec empressement cette occasion de vous exprimer de nouveau tous mes sentiments d'admiration pour votre personne et pour vos travaux, et je vous prie de mettre aux pieds de Mme. Paget et de votre très aimable fille les hommages les plus respectueux de votre très dévoué confrère, L. PASTEUR.

In July, he was elected an Honorary Member of the Deutsche Gesellschaft für Chirurgie. On Aug. 6th, the Council of the College of Surgeons voted that a bust of him should be made at the cost of the College, and should be placed within the building. It stands now on the staircase of the College; and is an admirable example of the genius of Sir Edgar Boehm. It commemorates also the completion of the new edition of the Pathological Catalogue. This new edition, like the old one, was the work of seven years. Since the old edition, 1,750 pathological specimens had been added to the Museum, including series presented by Sir Stephen Hammick, Dr. Peacock, Sir Spencer Wells, and Mr. Christopher Heath. In 1863, some of them had been described by Sir William Flower, in a supplement. In 1875, Dr. Goodhart, who was then Pathological Assistant, began another supple-

ment. In 1877, Mr. Alban Doran was appointed Pathological Assistant. In July 1878, the Council of the College agreed 'that a new edition of the Catalogue should be prepared by Sir James Paget, with the co-operation of Dr. Goodhart and Mr. Alban Doran.' In 1881, Mr. Eve was appointed Pathological Curator; and the specimens added during the printing of the new edition were described by him.

Dr. Goodhart writes of the long work over the Catalogue:—

We used to meet at two o'clock on Saturday afternoons, sometimes on other days, in the Museum galleries, and go over the new specimens together. Sir James would take the preparation, and one of us would read the description of the specimen. I can see him now, as it were but yesterday, with his eyes intent on the jar before him, listening, and always insisting that the description should point out all that could be seen, and nothing more: but the description of all that the specimen showed had to be as complete as possible. He was very particular about the style; but I think this came out more in the corrections that I noticed afterwards in the copy or proof than in the criticisms that he made at the time. I always thought that he was too careful of the feelings of his assistants, though very fond of his child 'the original catalogue' and very determined that nothing should be added therein that did not conform to the standard he had originally set up, and which time has proved to be a worthy model. The amount of work Sir James did was by far the larger part. Looking back upon it from this distance of time, it almost seems that I did very little: and, quite early in the work, he astonished as well as delighted us by voluntarily undertaking all the arrangement of headings, references, cross-references, and indices; because, as he said, it had always been a pleasure to him to make an index. 'Verify your references,' was another maxim he often used. To most men, I think it might be said, making a catalogue of specimens is not an interesting occupation: but Sir James so beguiled the time with stories and talk that those Saturday afternoons have often come back to me with fragrant memories, so keen was the enjoyment that he inspired.

His 1885 holiday was spent abroad—Lindau, Innsbruck, the Austrian Tyrol, Linz, Vienna, and home by Regensburg, Nürnberg, and the Rhine-country.

He gave two addresses this year: one at Netley Hospital, on Feb. 8th, at the presentation of prizes to the Army Medical School; the other on June 8th, to the Abernethian Society, on 'St. Bartholomew's Hospital and School fifty years ago.' It must suffice to quote two passages of the Netley address:—

(1) In our profession, most of us have to spend our lives in competitive examinations; various in method, but inevitable, and, if we make good use of them, very useful to ourselves and to many others. If I may speak of the civil department of our profession, and of the life which I have spent in it, in positions which many may have envied, I must say that I have never been long unconscious of being under examination. My rivals have included many of my best and most accomplished friends; and my examiners have been the members of my profession, many of whom have been as able to judge me as the members of any board to which you will be submitted will be able to judge of you. I can well remember how, in the beginning of my professional life, I felt when in consultation with my seniors; with men of more experience than myself, with wider knowledge, and with a just respect for their own opinions and the accepted beliefs of that time. Every consultation was an examination, on the results of which my progress, my promotion as you would say, might depend. And this was true, not only in private practice, but even more in the position which is so much competed for, that of surgeon to a large hospital. There, every opinion, every operation, was watched by a crowd of observant men, by colleagues and pupils, most of them able and willing to judge as strictly as they would judge of written papers.

It was my privilege to promote, at St. Bartholomew's Hospital, a system which I think should be adopted at all such institutions. On an appointed day in each week all patients who may need important operations, and can properly be moved, are brought into the theatre and there examined by the members of the surgical staff, each of whom in succession then states and explains to the students assembled, often in great numbers, his opinion as to the nature and proper treatment of each case. Have you ever submitted to a more serious test of your knowledge than this? Is it not like your own clinical examinations, only more severe? And the value of each opinion is tested by those who watch the progress of the cases,

and, according to the results, judge and speak of this or that surgeon as right or wrong.

Now, I have passed these examinations and gained, I suppose it may be said, my full promotion; and yet my examinations are not all over. My examiners are changed; the far greater part of them are my juniors; some of them my very distant juniors, in whom I have to envy, not their experience, but their familiarity with forms of knowledge which I cannot now attain. It is as if half the subjects of examination had been changed, and I am more than ever conscious of the danger of being plucked. It seems to be becoming certain that nothing can be right which was believed to be right so much as twenty years ago. My only comfort, sometimes, is in that wise saying that 'even the youngest among us is not infallible.'

I am ashamed to have talked so long about myself; but it is our habit, when we want to illustrate a general rule, to tell a case; and mine is only one instance of the general fact that many of us have to pass our lives in competitive examinations, and that for most of us it is well that it should be so. It is sometimes well for everyone if he has to say to himself not only 'I will' but 'I must.'

(2) Let me end with a wish—the wish that you and all in the medical departments of Her Majesty's service should be in much more frequent and intimate intercourse with the members of the civil department of our profession. We are now far too wide apart. I remember the pleasure and advantage with which, at the close of the last Egyptian campaign, large numbers of us met together, as I hope that at an equally successful end of this campaign we may meet again, and then may begin a much more frequent intercourse; for we have much to learn from one another. I have seldom been more conscious of my imperfection in knowledge than in my journey hither this morning with my friends the Director General, Sir Joseph Fayrer, and Sir James Hanbury; hearing the crowds of facts which in their services abroad they have gathered, facts all inaccessible to us at home. You may do as they have done; and if, when you are on home-service or on leave, you will bring your knowledge to our scientific societies, or to any of our various meetings, you may do us great good. And, perhaps, I may venture to say that you may receive a fair amount in exchange, if at those times you will be often at our civil hospitals and schools, and will gather knowledge from those who are working in them or are in active private practice.

Nothing but good, I think, could come from a more frequent association between the civil and the military and naval divisions of our profession. I trust that you will cultivate it.

And now, one wish more—that you may all live long and have the happiness of complete success, utility and renown, and may win and wear, as prizes, some of the medals which the Sovereign will confer on those who are distinguished by bravery and faithful service.

His address to the Abernethian Society was given to a great audience of students and nurses; and, after revision, was printed but not published. At the end of it, he speaks of the nursing fifty years ago; and then of the students of that time:—

1. In the department of nursing, there is the greatest and happiest contrast of all. It is true that even fifty years ago there were some excellent nurses, especially among the sisters in the medical wards, where everything was more gentle and orderly than in the surgical. There was an admirable Sister Hope, who had had her leg amputated in the hospital, and then spent her life in giving others the most kindly watchful care. A Sister Mary, a near relative of hers, was as constant to her charge; and there were some good surgical sisters too. They had none of the modern art; they could not have kept a chart or skilfully taken a temperature, but they had an admirable sagacity and a sort of rough practical knowledge which were nearly as good as any acquired skill. An old Sister Rahere was the chief among them, stout, ruddy, positive, very watchful. She once taught an erring house-surgeon where and how to compress a posterior tibial artery; she could always report correctly the progress of a case; and from her wages she saved all she could and left it in legacy to the hospital. And there was her neighbour, Sister Colston, rough-tongued, scolding, not seldom rather tipsy; and yet very watchful and really very helpful, especially in what she felt to be good cases. On the whole, indeed, it may fairly be said that the sisters were among the very best nurses of the time. The ordinary nurses were not so; the greater part of them were rough, dull, unobservant, and untaught women; of the best it could only be said that they were kindly, and careful and attentive in doing what they were told to do.

Nursing was not at that time, nor had it ever been, a subject of careful study, either needing or encouraging intelligence, and

I think that in this country, since its separation (except in the abiding name of Sister) from the tasks of the members of religious orders, it had scarcely been regarded as a work of mercy or philanthropy. It was not till twenty years later, in the Crimean War, that Miss Nightingale showed what might be done in hospitals by highly cultivated, courageous, and benevolent gentlewomen; and the noble example which she showed had, I think, more influence than anything else that can be told-of in the production of the happy changes in the midst of which you work.

I believe, indeed, that fifty years ago the admission of young ladies to be nurses in this or any similar hospital could not have been seriously proposed. It would have been called indecent, audacious, unprincipled, and I know not what besides; and the notion of their being associated with medical students would have been deemed utterly vile; nothing but vile mischief would have been foretold of it. But I believe as fully that no more mischief would have come then than comes now, and that is none. Young ladies were quite as sensitive, as prudent, and as virtuous then as they are now; and students were as respectful to them in their own homes and in society. If they had chosen to work in hospitals they would have been as safe from insult or annoyance as they were in ball-rooms. Really, the question of admitting young ladies to learn nursing was never raised, because none at that time wished to learn it. There was far less earnest love of any of the kinds of active benevolence which you see now; much less prevalent religious zeal; very little district-visiting or teaching of the poor; very little longing for the exercise of practical knowledge anywhere but at home. And so ladies did not wish to learn nursing either for the sake of charity, or in the love of useful work, or the weariness of an unoccupied life.

When they did begin to wish it, they were too much and too long hindered. It was thought rather bold when a lady was admitted to attend my lectures; the courtesy of the students of that time showed that at least one could be safe; I wish it had been believed that I might have lectured then with as much propriety as I hope I do now to the hundred who are here this evening.

2. Among the students, the groups were more distinct, I think, then than now. There were, especially, three sets; the Cambridge and Oxford University men, who were regarded as sole fit claimants for the higher medical offices; the hospital apprentices who were alone deemed eligible for the surgical

appointments; and the general body of other students. . . . As for the general body of the students of my time, I believe they were, in comparison with others of the same age and same level, about as they are now. I cannot venture to say whether they were or are a little better or a little worse than young lawyers or young men of business. As among other students, there were a few thoroughly vicious fellows who came to a bad end, left the school in disgrace, or were plucked and not heard of more; and some idle fools, and some blockheads and untaught, who could never learn their duty. These have been caricatured as if they were types of the whole class; it would be as reasonable to sketch the general characteristics of Englishmen from a slight acquaintance with some inmates of a lunatic asylum. The majority of students then, as now, worked well; some were laborious—I doubt whether you could find better now.

There is a greater contrast in the play than in the work of that time and this. The pleasures and amusements then were coarser. There was much more drinking; a few were often drunk, and many, who never were so, would boast of drinking more than they thought they needed. Cursing and swearing were common in ordinary talk, frequent for emphasis, and nasty stories were very often told and deemed of the same worth as witty ones. Impurity of life and conversation were scarcely thought disgraceful or worth concealing. But in all these faults there were great differences among the students; some might boast of them, but many only tolerated them and kept as clear as they could; a few rebuked them, chiefly those who, in the slang of those days, were called Saints or Simeonites, after the great Cambridge preacher. But let me repeat, the students of that time were only living and talking after the ordinary manner of the day; the same faults, the same virtues, prevailed in all similar groups of men. . . . Students nowadays have more help, better guidance, better materials for study; but I do not know of more or harder work than in my own time; and, perhaps, this may be because there is more and better play. Fifty years ago there was no boat-club or cricket-club, at this or any other hospital; there were no regular athletics of any kind, no musical associations, no concerts, no private theatricals. All these things are admirable substitutes for the coarser pleasures of one's own day; but they have, I think, no tendency to make men work harder and more dutifully than some did at that time. Rather, perhaps, by giving more opportunity for the satisfaction of the love of

praise, they tend to diminish, in some minds, the ambition for success in the proper business of life.

I am sorry to suggest a possible mischief in amusements so charming as some that you have now; but, if there be one thing of which I have been made quite sure by what I have seen in these last fifty years, and not only at their beginning and their end, but through their whole course and through all the changes of which I have been telling, it is this; that those have done best who have had the most single mind for the proper duties of their lives, and who, in striving after fitness for them, have cared least for the circumstances in which they were placed; who have used every help, but depended on none; and have set no limit to their work but the limit of their power.

1886.

On March 8th, 1886, he was elected an Honorary Fellow of the Royal College of Surgeons in Ireland; and, on June 29th, a Foreign Associate of the Académie de Médecine. This year he finished and put aside the Memoirs of his life; he had given four or five years to them, as part of his evening's work; neither making a secret of them, nor talking of them. He kept them by him for three or four years; and then gave them to one of his sons, saying 'Do what you like with them,' and never mentioned them again. Now that the Memoirs, and the new edition of the College Catalogue, were off his hands, he began his 'Studies of Old Case-Books,' short essays founded on his notes of his private practice. In 1886, he had been in practice for half-a-century. In the earlier years, he used to make very long and elaborate notes of his cases, on tall separate sheets; later, when his practice was at its height, he kept short notes, with many forms of abbreviation, in big square note-books. But, long or short, every note was written with the utmost care and neatness, and every case was recorded and indexed: and the day's letters and the day's cases took precedence of all other writing or reading at night. He never dictated these notes; but his letters, in the great years of practice, were dictated to his assistant. The surgeons who were in turn his assistants—it is absurd to give only the names of those who were so near him—were Mr. Morrant Baker, Sir Thomas Smith, Mr. Marsh, Mr.

Ewbank, and Mr. Bloxam. After he gave up operating (1878), his nephew Dr. C. E. Paget was his secretary; and then one of his sons. He used to dictate his letters in a very low voice, sometimes in a whisper, sitting at his desk, while talk and music went on round him. Of this part of his work, in 1865–1870, Mr. Marsh[1] says 'He never went to bed till every letter was answered: I have many a time sat with him writing letters from 11.30 P.M. to 1.30 or 2 A.M. As I used shorthand, he would dictate two or three letters, and while I copied these he would write others, and thus we got through twenty or thirty, and I went home feeling I had had quite enough of it, but yet with orders to meet him at eight, or even at half-past seven the next morning, to go into the country, or to Brixton or Islington, to help him at an operation. Nursing homes in Welbeck Street or Wimpole Street had not then been dreamt of.'

But, though he often dictated his letters, he always wrote-up his case-books himself: and had notes of many thousand cases, all in exquisite order. Long before 1886, he had been thinking how he might make some use of them: he writes from Russia to one of his sons, in September 1884, 'When you return from your holiday we will (all well) begin work together, and see whether great pleasure may not be found in *New Notes on Old Cases*. There's a good title; which, I think, this unsteady carriage shook out of my head; for I have often in quietude tried to think of one and always failed. Keep it in mind: it may not bear second thoughts.' These essays were his chief work every evening, from 1886 to 1891. His practice, of course, was becoming less; the number of letters to be written was not twenty or thirty, but six or seven: but he still dictated them, not to save himself trouble, but that his secretary might learn something by writing them.

In April 1886, he was appointed Chairman of the Pasteur Committee, to report on the Pasteur treatment against rabies. (The date of the first case treated, the boy Joseph Meister, is July 1885.) The other members of the Committee were Sir Thomas Lauder Brunton, Dr. George Fleming, Lord Lister, Sir Richard Quain, Sir

[1] See his admirable account, *In Memoriam*, in the St. Bartholomew's Hospital Reports for 1900.

Henry Roscoe, Sir John Burdon Sanderson, and Mr. Victor Horsley, Secretary. Sir Henry Roscoe had called attention in the House to the importance of the treatment; and the Committee was appointed by Mr. Chamberlain, then President of the Local Government Board. Mr. Horsley has written the following note of their work:—'The Committee instituted a thorough enquiry into the documentary records of M. Pasteur's work; and a series of experiments was devised to strengthen or disprove, as the case might be, the points laid down by M. Pasteur. The conclusions they arrived at confirmed to the full the truth of M. Pasteur's discoveries; at the same time the Committee pointed out that in this country it was especially easy to secure the extirpation of rabies by suitable muzzling and quarantine regulations. These preventive measures were put in force, and again in more recent years by Mr. Long, with the result that rabies is now practically unknown in this country.'

On May 8th, M. Pasteur writes:—

Cher et vénéré maître,—Je reçois votre aimable lettre où vous avez l'obligeance d'accumuler séductions sur séductions. Certainement j'ai bien besoin de repos, et j'aurais un grand plaisir à aller pour quelques jours en Angleterre. Mais pour le moment c'est impossible. Je suis pris dans un engrenage dont je ne puis sortir. Je songe cependant sérieusement à remettre en d'autres mains l'application de la méthode de prophylaxie. Mais que de peine j'aurai à m'en désintéresser! Recevez, je vous prie, l'expression de ma reconnaissance, et celle de Mme. Pasteur, et de mon affection.

Later, he writes again:—

J'attendrai avec une certaine impatience l'effet que produira sur le public anglais le rapport de la Commission dont vous faites partie. Voyez, par l'article ci-joint, extrait du journal français, du *Temps*, tout ce qui se sépare chez vous et chez nous. On imagine difficilement l'hostilité sourde ou publique à la quelle je suis voué par cette découverte de la prophylaxie de la rage après morsure. Un journal belge, rempli de mensonges et de calomnies odieuses, a osé jusqu'à insérer dans ses colonnes une provocation à l'assassinat sur ma personne. Heureusement j'ai de quoi me consoler de ces turpitudes, en pensant

que je touche au nombre de mille personnes déjà traitées et que je n'ai pas eu un seul accident dû au traitement; que sur la jeune Pelletier seule, traitée 37 jours après une énorme blessure à la tête et à l'aisselle droite, le traitement a été inefficace :— ainsi que sur quelques Russes mordus par les loups enragés, à la tête et au visage. Présentez, je vous prie, mes très respectueux hommages à Mme. et à Mlle. Paget, et recevez vous-même l'expression de tout mon respect. L. PASTEUR.

(On May 1st, 1887, he writes again :—

Je n'ai pas besoin de vous répéter ce que j'ai dit au professeur Horsley, que le rapport de la Commission anglaise aura une importance très grande, une influence particulière sur l'opinion publique. Depuis mes études d'autrefois sur la question des générations, dites spontanées, depuis que les *intransigeants* n'osent plus s'élever de la matière minérale à la cellule vivante et de proche en proche au singe et à l'homme, au nom de la science, je suis leur bête noire. Tout le parti politique est irrité contre moi. Joignez-y les anti-vaccinateurs, les anti-vivisectionnistes, les médecins envieux et ignorants, et vous avez une idée affaiblie des calomnies qui me poursuivent et des mensonges que l'on accumule contre la méthode de prophylaxie de la rage.)

On May 29th, 1886, Sir James spoke at Oxford, at the unveiling of the statue of John Hunter in the University Museum. In the course of this address, he read one of Hunter's famous letters to Jenner, as an instance of the vast extent of Hunter's work, and of his neglect of *literæ humaniores* :—'Dear Jenner, You must think me very fond of Fish, when you even send me cheese as much fishifyed as possible. However, it is an excelent cheese, and every country has laid claim to its birth. I have but one order to send you, which is, send everything you can get, whether animal vegetable or mineral; and the compound of the two; namely, animal or vegetable mineralised. I would have you do nothing with the boy but dress him superficially, these fungus's will die, and be damn'd to them, and drop off. Have you any large trees of differ[t] kinds that you can make free with? If you have, I will put you upon a set of exp[ts] with regard to the heat of vegetables. Have you any caves where batts go to at night? If you have, I will put you upon a

set of exp[ts] concerning the heat of them at diff. seasons. I should have been extremely happy to have had the honour of a visit from Lord Barkley. Ever your's, John Hunter. Anny sends her comp[ts], and thank you for all favours. Write down the case.' Hunter had been sent to Oxford: had got no good from it—'they wanted to make an old woman of me'—and had gone down, after two terms:—

Hunter was entered at this University, and he resided for two terms in St. Mary Hall. He left it, I should think, with regret, finding himself absolutely unable to study classics. It is recorded that he left it with undisguised contempt; but if he did so, it was an expression of his ignorance, for in all his after-life one can see that his great defect in all his work was want of literary knowledge. I have read many of his letters, and have read many of his manuscripts, and I think there is not one of them in which either construction or orthography would obtain high marks in an ordinary board-school of the present day.

His summer-holiday in 1886 was partly at St. Ives, Huntingdonshire, partly in the Pyrenees—Cauterets, St. Sauveur, Luchon; then Carcassonne, and a second sight of his beloved Nîmes, Arles, Avignon, and Orange. In December, he spoke at a festival at the Hospital, when the restored north transept of St. Bartholomew's the Great was opened. He always loved the Founder's church; and was glad that he lived to see it rescued from neglect and disfigurement.

Letters to George Paget. 1886.

1. *Feb. 8th.*—I am very much obliged to you for your note about Mrs. ——. The facts you tell may really help me in the work I have in hand—a work which, however, will perhaps never be out of hand. I am looking through my old case-books to see whether they contain anything worth publishing: and I am coming to be nearly sure that they do not. Still, it is interesting and, on the whole, though with many exceptions, agreeable work; and I can recommend the like to you. . . . Here is a bit of Grillion's, from Mr. Plunket—'My grandfather was put out of the Lord Chancellorship of Ireland, that Lord Campbell might be put in: and when they told him that, in

crossing from Holyhead, Lord Campbell had been horribly sick—'Ah,' he said, 'but he didn't throw up the seals.'

2. *St. Sauveur, Pyrénées, Sept. 14th.*—I have never felt more refreshed, or a more rapid change towards better health and more readiness for activity. I find, as part of my anthropometry, that I can enjoy 12 miles of roughest mountain-roads, with an up and down of 2,500 feet—and very thankful I may well be at the discovery: it is at least six years since I had a mountain-walk. *Lyons, Sept. 28th.*—Real work is to begin again, all well, on Monday afternoon—and, actually, with a consultation on a case at Hong Kong, to be conducted by telegraph. I have not heard of any intention of Pasteur to come to London: but as soon as I am at home, I shall write and ask him to stay a few days with me: and, unless I hear from you, I shall think, from what you told me, that I may say to him that, if he is in Cambridge, it is at least very probable that he will be offered an honorary degree at Cambridge. I am very sorry that you feel 'failing.' Of course, at our age—as I may fairly call it—one must thus feel, in some, if not in all, respects: but I suppose we may still manage, if we reduce our work and our pleasure to the level of our power. I am really doing this and find, also, that it is being done for me. *Dec. 21st.*—I write for others as well as for myself, in wishing you many happy returns of your birthday. The meaning of the 'many' must of course diminish every year: but not the meaning of the 'happy'; and we all wish you this to more than any probable power of enjoyment; for thus you may be at least as happy as possible for so long as you live: and may God grant that this may be really long.

Letters to his Family. 1886.

1. To F. P. *Jan. 11th.*—I thank both you and Helen very heartily for your kind wishes on my birthday. They are enough to make me wish more than is wise that I may yet see many years: but I may, at least, and do desire intensely that, for so long as God may grant me life, He may grant me also the constant love of all whom He has given me, and the happiness of seeing them all prosperous in good works.

2. To M. M. P. *March 23rd.*—The 'ceremonial' of to-morrow has raised questions of dress and other rather-follies which have taken more time and thought than they deserved—some of them ending in my having to go in Levée dress under the Academical Robes—the most complete harlequin off the

stage. I tried to gather stories for you at Grillion's yesterday; but there were few, though the company was large and brilliant. There was the less general talk, I think, because Gladstone was there and so earnest on some matters with Lord Wemyss, next to whom he was sitting, that he did not 'come-out' at all. But something was said about secrecy and overhearing, and then it was told that the last Sir Robert Peel hated all rooms that had two doors, and would not have them at Tamworth. And it was fun when Gladstone and Lord Rosebery went aside after dinner and talked seriously; and all laughed at the thought that 'walls have ears.' I asked Lord Harrowby whether a Cabinet used any telephonic test to detect the power of the walls of their room: and he said 'No: but we had once to change our room: for things did get out of it.' And, they told of a great discovery of historic documents, in a loft over stables, at Belvoir Castle. It was crammed full of them, and they had been completely forgotten. Among them were authentic records of part of the life and of the death of Amy Robsart—who was a Norfolk girl, not a Scotch one. There—so much from Grillion's.

3. To F. P. *Aug. 7th.*—I thank you, and Helen too, for your very kind invitation, but I cannot leave London when, for pleasure, I would. My old and good friend Busk is dying; and his wife and daughters are so admirably devoted to him that I cannot let a day pass without seeing him once or twice. . . . I was at St. Ives yesterday afternoon—and had the joy of brilliant sunshine and light clouds and wide stretches of green such as only England ever shows. *Aug. 22nd.*—I am extremely glad to hear of your discovery of the Hooker MS.: a real treasure. I hope you will not wait for the publication of the new edition for giving an account of it. . . . I am glad you like the holiday-plan: but I feel still rather doubtful whether there will be in it opportunity enough for quiet enjoyment in good air. I have rarely been more tired, and feel as if I wanted to leave off thinking and every form of activemindedness for at least a month.

4. To S. P. *Cauterets, Sept. 5th.*—Business first. I am not sure about Mrs. ——: for recently I have seen one patient nearly lunatic and have been talked-to about another, and I am unclear as to their names: but, for either, you have done the best. Then for your enclosed letter. I will write to Dr. —— declining the dignity of Chairmanship: and will not answer the lithographed request for a testimonial: and if Dr. —— should write again you can tell him that I am abroad and that I

wished you to send me only urgent letters, such as might refer to things for which I am already responsible, or something of that kind. I am amused by some things in your letter. Miss ——, I suspect, finds you not fool enough or rogue enough; she is one of those clever persons who insist on being cheated by some one more clever still. *Carcassonne, Sept. 21st.*—We came to this strange place last evening—just too late to see more than a dim outline of the distant old fortified town on the hill. We all had restless nights, and so had mosquitoes: but their's was with joy, our's with grief, and we all bear some marks of their pic-nics. But, we have seen wonders enough for compensation: for really the old town of Carcassonne shows and teaches more of what fortifications and fighting were from 500 to 1,000 years ago than anything one ever before had a chance of seeing: and it is all in admirable keeping. *Nimes, Sept. 24th and 25th.*—All these places are so beautiful or so full of historic interest that two visits cannot discover nearly all their worth; and a second shows how very poor one's memory of the first has, in four years, become. I can speak certainly of myself; I can only suspect the same defect in others younger than I am. Really I have enjoyed this visit even more than the last, and seem to have learned more in it; but this is, chiefly, because of my readings of Lenthéric, that admirable writer. If my congratulations seem perfumed, understand that it is with lavender and wild mint from the hill-side at the Pont du Gard: and with these is a wild-fig leaf from the rock on which the central arch rests. I gathered five figs there.

5. To F. P. *Nov. 11th.*—I have an impression that you once said or implied that the fifth commandment ordains that we should honour not only our parents of the last generation but our ancestors. Am I right or wrong? If right, I shall be very glad if you will tell me more about it; for I may have to make a speech, for the promotion of the restoration of the old St. Bartholomew's Church, in which I could well use the teaching. *Nov. 14th.*—I was at Manchester yesterday, at a very pleasant dinner for the beginning of a Club of London University Graduates, of whom not less than 180 live there and in other big places not far off. It was not a bit the less hearty for the seeming competition with the 'Victoria' in Manchester itself; but who can tell what will come of this multiplication of Universities? Good on the whole, I do not doubt: but with what losses of what is good for the present I cannot even guess.

1887.

This year, he and the Duke of Westminster and Sir Rutherford Alcock were appointed trustees of the Women's Jubilee Offering, to consider and report upon a scheme for applying it to the public advantage. They reported that the best method, and that which would be most gratifying to those who contributed to the Fund, would be by the foundation of an institution for promoting the education and maintenance of nurses for the sick poor in their own homes. A provisional Committee was appointed, and eventually a Royal Charter of Incorporation was granted, by which the purchase-money was invested in the names of the trustees. By the pleasure of Her Majesty the late Queen, the Institute was associated with the ancient Royal and Religious Foundation of St. Katharine's, and the Charter appointed that the Master of St. Katharine's should be President of the Institute. The Rev. Arthur Peile, Master of St. Katharine's, writes:—

From henceforth the influence and the interest of Sir James Paget were given in the work of the Committees and the Council. He was always ready with his judgment and his knowledge to promote the great work which had been set on foot for the benefit of the sick poor, and which has proved to be of such advantage. He was present at Windsor on the occasion of Her Majesty's reception of 'The Queen's Nurses' on July 7th, 1897. As long as his health would allow, he was constant and regular in his attendance both at Committees and at meetings of the Council; and to the last took deep interest in a work with which he had been so closely connected from its very commencement.

This year, also, he was President of the Pathological Society of London. He was at this time 73 years old, and it was 40 years since he had given the first of his Lectures on Surgical Pathology: his address to the Society shows his resolute will not to be too old for the work of younger men:—

It is a great compliment that I should still be thought fit to be President of a Society of which the most active members are much younger scientific men, some of whom are studying pathology in subjects and with methods almost unknown to

me. If I can be at all fit for the office, it may be because, in my very imperfect knowledge of the numerous methods in which pathology is now studied, I can look with full respect upon them all. . . . It is characteristic of modern pathology that, as it certainly surpasses all other sciences in the variety and complexity of its problems, so it offers work sufficient for the employment of every variety and opportunity of the scientific mind. Pathology, as distinguished from practical medicine, used to be regarded as scarcely more than morbid anatomy; but now there is in it work not only for the anatomist and physiologist, but for the clinical observer, the experimentalist, the minutest microscopist, the statistician, the chemist, the naturalist, the historian, the psychologist, and yet more. I cannot pretend to be all these: and I will not pretend to decide who has done the best work or is likely to do it in the future. Only, it is certain that complete pathology must be constructed from the works of all these; they are all mutually dependent, mutually corrective, none can alone suffice, and none can safely be neglected.

He goes on to speak of the study of pathology in active practice, and how 'practice is full of opportunities for science':—

What practice may be, depends in all respects much more on the person engaged in it than on its own subject-matter. It may be for one a noble profession, for another a vile trade; and in equal contrast it may be a mere useful art practised by one who has neither love nor knowledge of any science, or to the man of scientific mind it may be a thoroughly scientific study, as well as an applied science. I could name many living in active practice, of whose work a great part is as definitely scientific as is that done in any other section of biology. And so are the works of many who are gone. I remember that during my apprenticeship, more than fifty years ago, in a *post-mortem* examination of one who had died with dropsy, a young Guy's man said, 'Dr. Bright, of Guy's, says there is a form of dropsy which is always associated with disease of the kidneys.' This was accepted by the practitioners standing by as a singular fact, and nothing more. Or, again, could any fact stand more alone than did that of the use of vaccination as first observed by Jenner? And now it may be honoured as the first knowledge attained in all that wide range of pathology in which Pasteur's work has been done, and to which Power and

Klein have lately annexed their admirable discovery of the true source of the milk-scarlatina.

And, at the end of his address, he has a fling at a word that he hated, 'structureless':—

Let me only add one warning suggested by that word 'structureless.' It suggests the recollection that we are all apt at times to submit to the fascination of promises of finality; to find comfort in believing that we have really reached a boundary, that something is really structureless, or that there is a protoplasm which is the same always and everywhere, at least in the same species, or that in apparently similar substances there may be differences of potentiality; as if in things material there could be differences of power or property without differences of structure or of composition. We should get rid of these idle-making fallacies. The protoplasm in every structure, or of every embryo, must be as essentially different from that of every other as is the structure or the creature which in due time it may become; and these differences will be discovered by our successors if we—I mean you—do not discover them.

It will be a singular pleasure to me if, in my office as President, I can promote the modern methods of pathology. To do so will make my office very happy and very useful to me in helping me to avert that sad defect of old age, the indifference or dislike to the changes which come of the increase of knowledge. One sees that, as men grow old and wish for rest, they are prone to ask, Where are we to stop? I do not know more than this: that we must not stop where we are; we must go on and on, and we may be sure that those who work to find the truth will not work in vain—sure that with true work true good will come. So I will hope that it may be here during my presidency.

Here, in this last paragraph, seventy-eight words of one syllable come together: he was fond of the use of ultra-Tennysonian monosyllables.

In April, he was occupied, with Mr. Victor Horsley, over the report of the Pasteur Commission. He writes to one of his sons, on April 7th, declining an invitation to spend Easter at Oxford:—

I have promised to help in a serious case, and I may be wanted for it on Sunday: and, last night, I had to promise

that I would prepare the Pasteur-report of the Commission of which I am Chairman—and which must be finished 'for a first reading' on Tuesday. And I must take trouble about it, for there are many who will, if possible, make mischief of it. Here is something for you to preach about—the pleasure which some good men have when they think that others are failing to do good under other guidance than their own—*e.g.* the Spectator is evidently pleased at the thought that Pasteur cannot prevent hydrophobia. Happily the judgment is erroneous as well as the temper.

M. Pasteur writes to him, thanking him for the report:—

Cher et vénéré maître,—Je viens trop tardivement vous remercier de l'envoi du rapport de la Commission dont vous étiez le Président. La lecture de ce rapport m'a procuré une satisfaction dont vous devez comprendre l'étendue. Pourquoi les nouveautés dans la science sont-elles toujours obscurcies à leur début par la mauvaise foi des uns et l'esprit brouillon des autres? C'est un fléau de tous les temps dans notre pauvre humanité, auquel votre haute philosophie doit mal s'accommoder. Quelles tristes études, par example, que celles des de Renzi et Amoroso, des Abren et von Frisch! Le rapport de la Commission anglaise me donne désormais le droit de n'attacher aucune importance à de telles expériences où se trouve violé à chaque pas cet immense progrès de la médecine et de la chirurgie qu'on peut exprimer d'un mot—*la pureté dans les opérations*. Par exemple, cher et vénéré maître, ici on a fait déjà sur l'homme plus de quarante mille injections hypodermiques de moelles préventives, et pas une seule fois nous n'avons eu un abcès à regretter.

In June of this year, he received the honorary degree of Doctor of Medicine of Trinity College, Dublin: and went over to Dublin that the honour might be bestowed on him. Professor Tyndall writes, congratulating him:—

Hind Head House, Haslemere, 3rd July, 1887.—My dear Paget—Though an identical cause deprived us of the presence of you and Simon, the cause was a gratifying one. Surely Trinity College honours itself by honouring you. Notwithstanding the bar of heterodoxy, they were liberal enough to give me a degree in Dublin some time ago. In fact the world has been very kind to me; and its general good will has been vastly

enhanced by the steadfast kindness of private friends like yourself. Always, dear Paget, most faithfully yours,

JOHN TYNDALL.

His summer-holiday this year was partly at Wimbledon, partly abroad—Lucerne, Innsbruck, and Verona; he intended to go to Rome, and had letters of introduction from Cardinal Manning; but the hot weather drove him north again, to his beloved San Martino; where he met, for the last time, Mr. Browning. In October, he gave an address at Owens College, at the opening of the winter-session. Like his other addresses, in his later years, to students, it is in praise of science, and of the duty of keeping a mind for science in practice. To be scientific in practice, the student must train himself, by 'steady and severe self-cross-examination,' to observe facts accurately:—

By accurate observation we must mean not the mere exercise of the senses, not the mere seeing, or hearing, or touching of a thing, with some levity of thinking about it—we must not mean even the keenest use of the eye cultivated in microscopic work, or of the ear hearing sounds that to the uneducated sense would be inaudible, or the use of the finger with the most refined detective touch. All these higher powers of the senses you must acquire by careful study and practice, and you must learn to exercise them with all the attention with which a strong will can direct and watch them; but even all this, difficult as it is, is only a part of scientific observation. This must include, besides, an habitual constant watchfulness, the taking notice of all the conditions in which objects or events are found; their concurrence, their sequences, their seeming mutual relations, all their variations. To do this, and to do it again and again, and with constant care, whether it be in things occurring naturally or in experiments—to do this accurately and always is really very difficult. A few seem to have the power naturally; there are some born naturalists, some born physicists; you have had some here; but in nearly all men, and, you may safely believe, in yourselves, the power to observe accurately needs careful self-training, self-suspicion, and self-discipline. . . . I have been more than usually impressed with these thoughts after lately looking through many of my old case-books, and finding in them evidences of more oversights and errors of observation than I had imagined

myself guilty of; and, though I might console myself by the examples of the distinguished men who did not discover vaccination, or the use of auscultation, and did not improve the treatment of aneurysm, yet it made me think that, as an act of penitence, I ought to try to make amends by warning some who are beginning such work as I have so failed in. For instance, among my records are those of nearly all the *post-mortem* examinations which I made nearly fifty years ago, when I was demonstrator of morbid anatomy at St. Bartholomew's Hospital. They are full and tedious; but the evidences of oversight and of errors in observation are many. I find, for example, complete and full records of the examinations of typhoid ulcers of the intestines; and they are regarded as illustrations of the typhus fever then supposed to be prevailing. Many others were thinking the same, many had thought so years and years before; but about the same time Sir William Jenner not only saw such ulcers, but accurately observed them, and he observed all the conditions with which they alone coincided, and he proved that they were characteristic of a fever essentially different from typhus. In the same records, I find long descriptions of the morbid changes in different forms of embolism, but I wholly overlooked and missed their meaning till it was discovered by Virchow and my own pupil Kirkes, and by others more observant than myself. I saw all these things; they accurately observed them; they studied the associated facts; and embolism, which had been destroying healths and lives for ages in secret, was at last discovered.

There are some, indeed, who would tell you that the scientific man is ill-fitted for anything but science; that he cannot be punctual, business-like, a plain speaker, pious, or I know not what else. It would be difficult to find greater nonsense in any of the books or journals on a modern book-stall. There is nothing that a man may not be at the same time that he is scientific. I would not make light of anything that would hinder you from being business-like; for I should have to admit that I have known more failures in our profession through want of this quality than from the want of any other; more than from the utterest want of scientific or even of good practical knowledge. But the failures were not only among the scientific. Surely I need not say in Manchester that good men of science may be also good men of business; and what may be seen here may be seen everywhere. If a man of science cannot be business-like, it is the fault of his brain, not

of his study; he would have been the same in any other pursuit in life.

Then, looking back to the days of his Wardenship at St. Bartholomew's Hospital, he says, as he had said in those days, that a man is, in practice, what he was as a student:—

I have spoken of the methods of scientific study, of its machinery; but, it may be asked, what is to be the force? what the driving power? It must be each man's will, by whatever motive stirred; when the will is wanting, the most perfect scheme is useless; and let me take a privilege of age, and say to the much younger who are here as students that this will must be used and cultivated now, and from first to last, and that the will is even much more important at first than at last; for at last will becomes habit, as certainly for mental as it does for muscular uses. Such as the student is, such will be the practitioner.

I have put in print an anecdote of Mr. Abernethy which bears on this; and let me say he ought to be remembered not as a rough wit or a mere eccentric, but as a man of rare sagacity, an admirable surgeon and teacher, and one of the most graceful scientific writers of his time. Entering his lecture-room at the beginning of a session, he looked round at the crowd of students and said solemnly, 'Good God! what will become of you all?' Many years afterwards, I tried to find the answer to such a question; tried in the dullest way—by statistics. I traced the careers of a thousand of my pupils. I need not give the numerical results; but the general and certain rule was as I have said: such as the student had been, such was the practitioner. There were some few exceptions, but the general rule was clear; and so you may be sure it always will be.

On November 11th, at the College of Surgeons, he gave the first Morton Lecture, 'On Cancer and Cancerous Diseases.' In it, he sets aside the old doctrine, that cancer is a 'constitutional' disease—'I have not used the word 'constitutional,' for it has become as indefinite and misleading in pathology as it seems to be in politics. . . . I believe that micro-parasites, or substances produced by them, will some day be found in essential relation with cancers and cancerous diseases. Mr. Ballance and Mr. Shattock have, indeed, lately failed to

find any; and if, in such a question as this, negative evidence could prove a negative, certainly their's might make us hopeless. I would not be so, especially if workers so earnest and so skilful as they are will continue the search.' It is to be noted, that the purely clinical facts, which he published in 1874 on this subject, were the starting-point of the later microscope-work of Darier, Wickham, and others, on the protozoa found in such cases as he had described.

Letters to George Paget. 1887.

1. *San Martino di Castrozza, Sept. 20th.*—Nothing that I have seen can match with the beauty of this scenery: with its rich meadows, and immense pine-forests, and its ranges of mountains rising in high narrow pyramids, and rent and cracked in every diversity of shape, and, at sunrise and sunset, and in the after-glow, quite brilliant with the characteristic ruddy and orange Dolomite colours, strangely contrasting with the cold grey ashy look which they have in paler light. It is quite glorious and past describing. Besides, the air is intensely refreshing: bright, clear, and cool, even nearly cold except in the full sun's rays. It seems to have marvellously changed me in my anthropometric estimates. At Wimbledon, 1½ miles, with an ascent of 100 feet, were a trouble and wearied me: here I can walk 15 or 20 miles, including an ascent and descent of 3,000 feet, with far less fatigue than I had there. And I feel, thank God, in every way refreshed: if I had mental work to do, I think I should be fit for it; but I have no chance of trial at it.

At a little place called Vezzano, where we stayed for luncheon in an excursion from Trent, they pressed us strongly to buy some Vino Santo, grown in the neighbourhood. And, to show us how many orders they had had from the Inglesi, they brought their book, where we found this entry—*Signor Latham, Direttore della Università reale de Cambridge, London*—an order for some of the precious wine. Ask him for some when you have a chance.

[The following letter refers to an invitation to Sir George Paget that he should stand for Parliament, in succession to Mr. Beresford-Hope. He was content to second the nomination of Sir George Stokes, who was elected without opposition. A similar invitation was

offered to Sir James Paget, at one period of his life, in the Conservative interest; and, at another period, in the Liberal interest. But, all his life, he was non-political. His nephew, Dr. C. E. Paget, who was his secretary for seven years (1878–1885), writes, 'It was his habit to read the 'Times' regularly in his carriage during the afternoons, while driving round on his professional visits; but I do not remember ever to have succeeded in getting him to express himself with definite conviction on any political subject.' Once, he did express himself, with some vehemence—calling them 'those beastly politics.' His 'political apathy' was due mainly to his belief that 'these things are all settled in the Cabinet,' and that men outside the political life could not possibly know the facts of the case.]

2. *Oct. 29th.*—I am, on the whole, glad that you have decided 'No.' The University is one of the few places which it may justly be deemed an honour to represent in Parliament, and you would have represented it just as it should be, and with honour to yourself; but this could not have been without serious risk of health and some even of life. It must be right, not to incur these unless for some more evident and personal duty. The choice of Stokes is, I think, a wise one. His position among scientific men, and his whole character, are completely admirable, and his opinion on all questions in which Universities are especially concerned will, probably, be of much weight. He may be, like yourself, too much above the mid-level of the House of Commons; but he may also be an excellent study to show how good an Irishman can be. And so it is settled that in this generation of us Pagets there will not be an M.P.

3. *Dec. 21st.*—I write for all here, as well as for myself, in wishing you many happy returns of the day. Of course for both of us the meaning of 'many' must change as time goes on; still, we wish you as many as possible, and all of them as happy as any of the past. May God grant you this, to the joy of ourselves and of all with you. My love and good wishes to them all. I will not write more now—if I were to do so I must write of the loss of our old friends, which it is wise to think of, but not to put in among thoughts for the happiness of a birthday.

1888.

On March 3rd, 1888, he gave the annual address to the London University Extension students. At the end of it, speaking of the power of science to satisfy the love of novelty and of wonders, he said:—

To the scientific student there are new wonders everywhere. Let me tell the last that I observed. Mademoiselle Janotha was so good as to play on the piano, at my request, one of the swiftest pieces of music known to her, a *presto* by Mendelssohn. The time it occupied was taken, and the number of notes was counted. She played 5,995 notes in four minutes and three seconds; rather more than twenty-four notes per second. We may, from this, estimate approximately the number of what we may call nervous vibrations transmitted during a given time to and from the brain; from the brain to the muscles, and from the muscles and the organs of hearing and of touch to the brain. Each note required at least two voluntary movements of a finger, the bending down, and the raising up; and besides these there were a very large number of lateral movements to and fro of the fingers, as well as many and various movements of the wrists, elbows, shoulders, and feet. It was not possible to count these, but I think I can be sure that they were not less than at the rate of one movement for each note, making, altogether, not less than three voluntary movements for each note, even if we allow for the chords in which several notes were struck at the same instant. Certainly there were not less than seventy-two distinctive variations in the currents of nerve-force transmitted from the brain to the muscles in each second, and each of these variations was determined by a distinct effort of the will. And observe, for herein may seem a chief wonder, each of these movements was directed by the will to a certain place, with a certain force and a certain speed, at a certain time; and each touch was maintained for a certain length of time. Thus there were, as we may say, five distinct and designed qualities in each of the seventy-two movements in each second.

Moreover, each of these movements, determined by the will and exactly effected by transmission of nerve-force from the brain along nerve-fibres to the muscles—each of these movements was associated with consciousness of the very position of each finger, each hand, each arm, and each foot, before it was moved and while moving it, and with conscious-

ness of the sound of each note and of the force of each touch. Thus there were at least four conscious sensations for each of the twenty-four notes in each second; that is, there were at the rate of ninety-six transmissions of force from the ends of nerve-fibres, along their course to the brain, in each of the same seconds during which there were seventy-two transmissions going out from the brain along other nerve-fibres to the muscles. And then, add to all this, that during the time, in each second of which the mind was conscious of at least ninety-six sensations, and directed not less than seventy-two movements, it was also remembering each note to be played in its due time and place, and was exercised, with the judgment, in the comparison of the playing of this evening with those of time before, and with some of the sentiments which the music was intended to express. It was played from memory, but Mademoiselle Janotha assures me that she could have played it as swiftly at sight, though this would have added another to the four sensations associated with each note.

Surely, it is impossible to imagine what goes on in a brain thus occupied; I think it is most impossible, if that may be said, to one who has seen a brain and has carefully examined it. Really, it is inconceivable; and here I will end, for here is a lesson for the most serious thoughts. In facts such as these, science achieves the knowledge of the reality of things more wonderful than the imagination can conceive: it sustains the faith which holds that many things that are inconceivable are yet surely true.

At Easter, he went for a few days to Yarmouth. He writes to one of his sons:—

April 6th. Victoria Hotel, Great Yarmouth.—We are very happy here, and enjoying ourselves in brilliant weather, with an appropriate Eastern Coast's east and north-east wind. We all had a long walk through the town this morning, and I had great pleasure in remembering nearly every house we passed, and those who had lived in it; and nearly as much pain in seeing their changes, all drifting down, good houses becoming counting-houses, and handsome frontages built-out in shops, and all the signs of active foreign commerce gone. The change in the town is nearly complete—a busy and important place of commerce and shipbuilding is a fishing-place and sea-side watering-place. We went over the old house, and could trace what was beautiful in its forms, and all the arrangements

of its rooms: but not one fragment of its decorations remains except a beautiful Italian marble chimney-piece, and the drawers and closets of the great store-room.

He had many invitations from friends in the United States, and had thought this year of accepting them; but did not care to go without my mother, and was afraid of the voyage for her: so the summer-holiday was to San Martino again, *viâ* Schaffhausen, Berne, Grindelwald, and Botzen. At Schaffhausen, the sudden dangerous illness of one of the party gave him terrible anxiety—'The last ten days seem very strange as one looks back on them. I have never had to bear so great weight of fear for those most dear to us, combined with the feeling of so great responsibility: for it was impossible not to see the perils of either error or oversight.' One day, utterly miserable, he went to watch the new arrivals at the hotel, with a faint hope that an English doctor might be among them; and there was Dr. Clifford Allbutt—'I could not, in all England, have desired to see any other man more.'

This was his last long holiday abroad. In the three following years, he was in three great cities: at Paris in 1889 for the Exhibition, at Berlin in 1890 for the Tenth International Medical Congress, and at Rome in 1891 to see a patient. But in 1888 came the end of the old sort of holidays, with days spent in sight-seeing, and in long walks in the open country. He was tired of cities: he writes after Vienna, in 1885, 'We thoroughly enjoyed our time in Vienna, and had time enough to see its chief wonders, so that even I may hope to remember them: for here is one of the sadnesses of old age—one of the few, thank God, that I am permitted to be conscious of—that, however intensely one may be impressed by anything, the impression cannot be made deeply enough in the old brain to be long retained there; and, as if in sad inconsistency, the present seems to become always the most worth enjoying.' And, in 1886, he writes of a holiday-plan, 'I could wish it offered more time for mere scenery with little or nothing human in it: pray keep pure nature in mind.'

This year, on September 20th, he had the pleasure of opening the new Hospital at Yarmouth, and of giving his name to one of the wards.

Only a few of the holiday-letters of 1888 have been kept. After Schaffhausen, he enjoyed everything, and was amused at everything that he could not enjoy:—

Berne, Aug. 21*st.*—We have seen the Cathedral, in all its dull Protestantism; and the bears in their insatiable love of carrots and bread: and the glorious view across the town, from the Schanzli to the distant snow-covered mountains, varied and even decorated as it was this afternoon by a glorious rainbow, perfectly brilliant and for some time doubled. So we had an intensely happy afternoon.

Grindelwald, Aug. 26*th.*—I think one could not long enjoy this kind of Hotel-life in Switzerland: there is too much of the English life rather the worse for being freed from its usual social customs, and allowed all opportunities for the caricatures of costume and for small gossip and Alpine hero-worship. Our hotel is comfortable and quiet, being not that to which the 'best' and, therefore, the 'worst' also resort.

Albergo dell'Angelo, Doladizza, S. Tyrol, Sept. 1*st.*—I write while we are waiting for our *mittagsessen*, in the big public room of the Inn: for the room for guests is occupied by a large party of the Herrschaften, who seem to be staying here. And we are, really, having a capital luncheon (for now I am writing between the courses). Excellent thin soup (*nudelsuppe*) steadied with abundant large vermicelli, made, I expect, with the Indian corn which is abundant in the valleys below us. And then *kalbschnitzel*—Luke and I looked into the kitchen next door, and saw them cutting flesh, which looked such as a well-educated dog might just think worth eating; and now we have been eating better veal than can be found in England, unless among those who specially cultivate it. And it has had with it excellent preserved plums and quince and melon, such as Botzen and Meran make good trade with. And then has come good pancake with some kind of jam enrolled: and then some fruit and then café noir, with as pure coffee as one could hardly find in England—a really capital meal, the merriest thing of the day; for the rain is becoming much heavier.

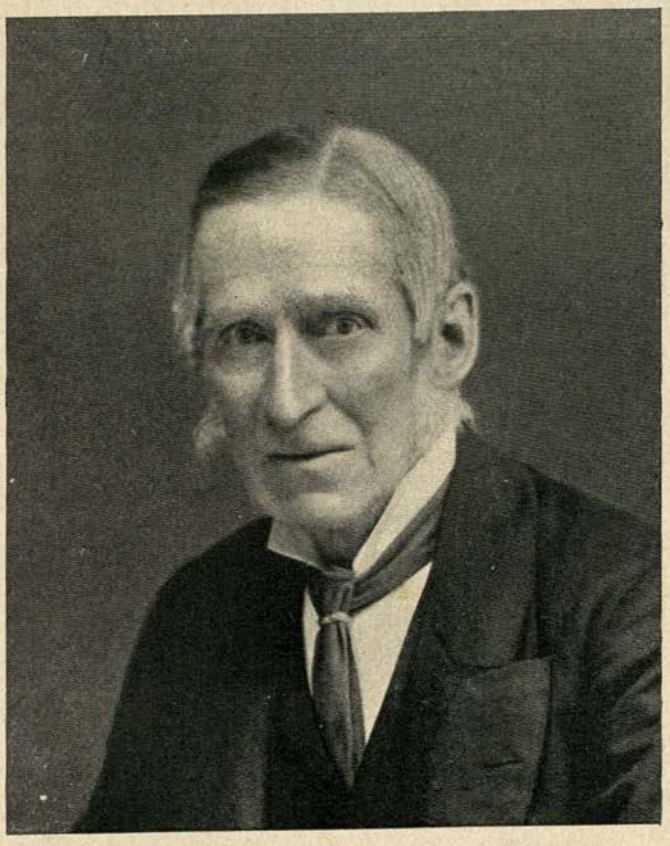
San Martino di Castrozza, Sept. 3*rd.*—Yesterday and on Saturday there was almost constant rain, and the whole of the lovely scenery, except the dimly lighted valleys, was hidden. To-day we have had all the more enjoyment; for the beauty of all the higher mountains and of all the Dolomite crags has been enhanced by their being nearly covered with snow. We

have never been in such scenery—the richest Tyrolese valleys surrounded by what could only be compared with Swiss snow-ranges in the most fantastic shapes—I cannot describe them; I do not know who could; I will not try. . . . You must not mind my telegrams: the happiness of knowing that, only a few hours ago, you were 'all well' is more than can be described. I never enjoy it without thinking of the vast eminence of science above legislation in the happiness given to men. *Sept.* 10th.—The scenery is as charming as ever—charming even in the sense of having a beauty which one cannot explain and which affects one as if by magic; and it has seemed to us even the more marvellous, now that we have seen the mountain-peaks on two days covered with snow and on three days in their full glow of colour in brilliant sunlight. We had a pleasant open-air luncheon yesterday opposite the highest of peaks and most complete and abiding of glaciers in the district: and, because of something strange in the physiology of clouds, it was the only splendid scenery hereabouts which they were not concealing. We watched and watched, and could not think why they came to the border of the glacier and then dispersed. . . . We send you Gentian and Colchicum—not for medicinal use—and Edelweiss, all of our own gathering.

VII.

1 *HAREWOOD PLACE, HANOVER SQUARE.* 1889–1893.

In May 1889, Sir James Paget was appointed a member of the Royal Commission on Vaccination. The Commissioners were Lord Herschell, Chairman, Sir James Paget, Sir Charles Dalrymple, Sir William Guyer Hunter, Sir Edwin Galsworthy, Sir William Savory, Mr. Bradlaugh, Dr. Bristowe, Dr. W. J. Collins, Mr. Dugdale, Sir Michael Foster, Mr. Jonathan Hutchinson, Mr. J. Allanson Picton, Mr. Whitbread, and Judge Meadows White: with Mr. Bret Ince, Secretary. Three members died before the seven years' work of the Commission was ended; Mr. Bradlaugh, Sir William Savory, and Dr. Bristowe: and Mr. J. A. Bright was appointed in Mr. Bradlaugh's place. The Fifth Report, recommending that multiple penalties should be abolished, and that persons imprisoned under the Vaccination Acts should not be treated as ordinary criminals, was published in April 1892; the Final Report, in August 1896; and the last of the Appendices, in 1897. The number of witnesses was 187, and many of them were examined at very great length—one for ten days, another for twelve. One hundred and thirty-six meetings were held, and 31,398 questions were put and answered: and reports and examinations of cases, on behalf of the Commission, were made all over the country. Sir James Paget was Chairman of 39 of the last 40 meetings. At home, he seldom spoke of the Commission. Once or twice, he told an amusing story of one of the meetings, or came home vexed and dispirited by wild anti-vaccinationist witnesses; and sometimes, but not often, he complained of the interminable length of the enquiry; and he spoke forcibly of certain cases where careless vaccination had done harm, and of the hardship of thirty or more



SIR JAMES PAGET

(From a Photograph by Mr. A. J. Melhuish)

penalties imposed over a single case. He writes to his nephew, Dr. C. E. Paget, Medical Officer of Health for Northamptonshire, on May 2nd, 1893, 'I hope we are coming to the end of our Vaccination-enquiry. The present epidemic will supply most important evidence: but I could wish that it were more on one side.' And, on Jan. 10th, 1894, 'I thank you for your Report on Small-pox. It is capital, and full of such clear facts as ought to be useful to all your people, but—bah! I am bound to appear impartial.' But there is nothing to be added to the following account of his work on the Commission, written by his friend Mr. Jonathan Hutchinson:—

My first acquaintance with Sir James Paget, whom I am proud to call my master, began when he was Warden of St. Bartholomew's and in residence at the Hospital; and it ended only with what I suppose was the last act of his public life, the concluding sitting of the Royal Commission on Vaccination. The object of my first interview with him was to take out a ticket for his course of lectures on Physiology, and at the same time to obtain his advice as to my presenting myself for examination at the College. After this, I was a constant attendant in his out-patient room, and in the wards whenever in the absence of Mr. Stanley he had charge of them. My admiration for his character and attainments was unbounded, and for some years I never missed an opportunity of listening to his teaching. There were many at St. Bartholomew's who regarded him in the same light, but I do not think there were any who surpassed me in an enthusiastic respect which I might almost call reverence. The pursuits of life necessarily separated us in later years. I became connected with the London Hospital, helped not a little by him in my canvass. In 1882 we were associated as members of the Royal Commission on Small-pox Hospitals; and, seven years later, as members of the Royal Commission on Vaccination. This was about the last of the numberless services rendered by him to the public good. The amount of Commission- and Committee-work for public objects which he did can never be estimated. Wherever his services could be obtained he was sure to be sought for, and he never accepted an appointment without zealously attending to its duties. He was regular and punctual on all occasions, and no one whom I have ever known could express his views more clearly or tersely, or make more sure of their effect. Many a discussion which threatened to be interminable

was concluded by a few chosen words from his lips. He did not speak often, and never lengthily, nor did he ever take up much of the time of the Commission in cross-questioning the witnesses. He was always a most attentive listener, and if ever a question of his own was interposed, it went to the heart of the matter. He was I believe Vice-Chairman, at any rate practically so, in both the Commissions: and, during a prolonged period of the Vaccination Commission, when Lord Herschell was frequently absent on official duties, Sir James took his place. The extent to which he had made himself familiar with vaccination-literature was wonderful, and he never quoted facts inaccurately. All his colleagues listened with the utmost respect to his expressions of opinion.[1]

Although of course an unwavering advocate of universal and repeated vaccination, he was an early convert to the expediency of Lord Herschell's proposal for what has been termed the Conscience Clause. Both he and Lord Herschell advocated this expedient in the belief that rigorous compulsion was impossible in England, and that it tended to provoke opposition. They thought, and the result appears to have confirmed their anticipation, that under a mitigated enforcement a greater amount of vaccination would be achieved; and hence their support of a measure which to many appeared to be a rather weak compromise. I have no hesitation in believing that it was Sir James' support which enabled Lord Herschell to carry his point.

That he might be able to do his full share of the work of the Commission, he resigned his seat on the Council of the College of Surgeons. He was, in 1889, seventy-five years old, and had been on the College Council for twenty-four years, and President in 1875. Of this long time of office, one who knew him wrote, on his death, in the 'Times' of Jan. 1st, 1900:—

Paget's management of other men and of affairs was very skilful, and depended to a great extent upon his constant willingness to listen to argument and to reconsider his opinions. No one could yield to adverse pressure with a better grace, and he never seemed to be so possessed by an idea as not to be able to throw it aside. Perhaps he was rather too fond of

[1] Another member of the Commission, Dr. W. J. Collins, writes in a happy phrase of his 'fine old-world and never-failing courtesy to all his colleagues.'

compromise, and he has been known to express wonder how men could so easily persuade themselves that their own views must of necessity be correct. In the Council of the College of Surgeons he exercised great influence, which was partly due to his inclination to be with the majority. He went with the tide to a considerable extent, and would seldom persevere in an opposition which seemed unlikely to be successful; not from the slightest inclination towards time-serving, but from genuine intellectual modesty, which led him to distrust his own judgment, and to think of the probability that others might understand the question at issue better than he did himself. . . . In questions of right, however, he admitted of no compromise: and, both by precept and by example, he invariably upheld the highest standard of professional honour and integrity.

Mr. Trimmer, who was for very many years Secretary of the College, writes:—

I had the pleasure of being associated with him during the whole of his period of office as a member of the Council, and the privilege of enjoying his personal friendship from the day of his election to the date of his death. He was a most active member of the Council, and a prominent member of its several important Committees, and took a deep interest in all matters relating to the welfare of the College. He was chiefly instrumental in bringing about the change whereby separate examiners in Anatomy and Physiology were appointed to carry on the examinations in those subjects, in the place of the Court of examiners; and he was one of the most influential members of the Committee by whose help the scheme for the Conjoint Examinations by the Royal Colleges of Physicians and of Surgeons was brought to a successful issue. He was an excellent man of business, and always punctual in his attendance at meetings, and I never remember his having been absent, except through illness, from the meetings of the Council. He was a most charming man with whom to transact business, being courteous to all with whom he came in contact, and ever ready to listen and give weight to the opinions of others who might differ from him. On his retirement from the Council, he still kept up his interest in College affairs, and, apart from his attendance as a Trustee of the Hunterian Collection, he frequently paid me friendly visits to learn the last Collegiate news.

Writing at this time to one of his sons, on a con-

troversy in the 'Times' concerning Church-ritual, he refers to his own work—'The Church is suffering the hindrances and mischiefs which seem inevitable in institutions which derive what are supposed to be privileges and rights from the State. In the institutions which I have to do with, I am often or always in doubt whether their Royal Charters and Acts of Parliament do not cause trouble and hindrance to good, much more than they give of advantage. But I suppose that as yet a separation from the powers would not be safe or altogether useful for any of us, and that we must only do our best in the conflicts with those above as well as with those beneath: they will never cease in our times. Men will never, I suppose, be all so good that they may be left without government; and it seems impossible to repress evil without often hindering what is good. So, we must often be in the fight—even if not in the Times.'

On July 1st, 1889, he spoke at the Mansion-House meeting in national recognition of the efficacy of M. Pasteur's anti-rabic treatment, and of the help given to more than 200 persons sent from this country. On July 9th, M. Pasteur writes to him:—

Cher et vénéré maître—Combien je vous suis obligé de la part que vous avez daigné prendre au meeting du 1er juillet, part décisive par la grande autorité, à la fois médicale, scientifique, et humanitaire qui s'attache à votre nom. Ne pouvant remercier individuellement tous les membres de la brillante assemblée, je viens d'écrire au Lord Maire, qui avait si remarquablement préparé le succès du meeting, une lettre ostensible qui, si elle est publiée, dira à tous les sentiments de reconnaissance dont je suis animé.

On July 29th, he was elected an Honorary Member of the Medical Society of Constantinople. His summer-holiday this year was at Lowestoft: he writes to one of his sons:—

Aug. 19th.—We have been able every day to get an 8 or 10 miles walk, and some of the places we go to are attractive: *e.g.* Yarmouth, except for the miserable 'Arryism on the beach; and Burgh Castle with its grand Roman walls and towers, and Mr. Colman's garden on the sand-cliff at Corton, a real wonder of skilful landscape-gardening; and Oulton Broad, and the long line of cliffs—I think I enjoy them the more for the

memory of the time very long ago when I used to walk about them or places like them: but the memory is very vague, and I have no poetic imagination which I might believe to be my memory. I suspect such mistakes are frequent; and here and harmlessly, I wish I could make them.

At the end of the year, he writes to Sir Edward Fry:—

Dec. 19*th*.—I hoped that I might see you after the Senate yesterday; but, failing, I venture to write, though contrary to your injunction, and to thank you for the decaying leaves which you were so good as to send me. The fact which they illustrate was unknown to me: I have never observed whether decay begins in one texture of the leaves rather than in another: but, if my own final decay does not precede that of the leaves of next Autumn, I will study it then. My observations were almost limited to the symmetry of the decay. It is, in some leaves, constant and accurate, and seems to prove that only the exactly corresponding portions in the two sides of a symmetrical leaf are exactly alike in composition and in mode of life—provided, of course, that they live in similar external conditions, especially as to heat and light. And the fact is important in its illustration of the symmetry of decay, and of some diseases, in ourselves and other animals.

1890.

On Jan. 30th of this year, he writes to Sir Henry Acland:—

Your letter makes me almost wish—but 'almost' is here far from 'much' or 'quite'—that I were invalid enough to justify my going to the lovely climate and the charms of scenery and novelty which you have enjoyed (at Teneriffe). But I have, thank God, no such excuse for absence; and, being still able to do some work, I am bound to be at least content with that of the Vaccination-Commission, and an unusual heap of University business. So I plod on; though my mental as well as my bodily speed becomes less. I hope that we may soon be able to talk together. If you propose to go to dear Gull's funeral, as I do if possible, you would have to come through London, and we may meet somewhere, or travel together.

This same year, he had to bear the loss of other friends beside Sir William Gull—Canon Liddon and Dr. Matthews Duncan. He writes to one of his sons, 'Your yesterday's letter did, indeed, bring sad news. I cannot say how much I regret Matthews Duncan's death. He was not only a charming and good friend, a man always to be relied on, but really one of the very best members of our profession. It would be impossible to reckon-up the good that he has done in London.' There is a delightful letter from Dr. Matthews Duncan to him, Jan. 16th, 1888, referring to a correspondence in the 'Times' on homœopathy:—

With pleasure I acknowledge receipt of the Morton lecture, and I thank you for it. I have already twice read it, and I shall do so again. What may be called higher or 'philosophical' treatment of medical or surgical subjects is so unfortunately rare that I feel your work as being that of a special benefactor to the profession. To see the wretched opposite, and a poor and blind and naked (philosophically) exhibition of us, read whole pages of the 'Times' occupied by the Grimthorpe &c. controversy. Cures homœopathic *versus* cures allopathic, and such trash!!! Facts homœopathic, such as that a 30th dilution of ipecac. causes sickness. Facts allopathic, equally valuable. After all, Sir William Hamilton is right, if such 'Times' literature represents us—we are not so far as Hippocrates.

In August, he attended the Berlin meeting of the International Medical Congress: his letters speak of the happiness of seeing Prof. Virchow again, and of Dr. Frankel's hospitality, and of many friends—Lord Lister, Mr. Clinton Dent, Sir Felix and Lady Semon, and many more—but he was tired, and longing to get home. 'We constantly miss you,' he writes to his wife—and again, 'I send you more love than I could ever tell you of'—'I keep you as near as I can by always thinking of you':—

Central Hotel, Berlin, Aug. 2nd.—I am just come-in from the first general meeting of the Congress, and have had the joy of finding your telegram with the news that you were all well this morning—the happiest thing, by far, that we have had since we left home. Many thanks to God for it. The meeting to-day was the 'biggest crush' that ever I was in. It was in

a Circus, as big round as the Albert Hall, but rather low and roofed-in and lighted with gas and electric lamps, having only one entrance and, I think, no windows. And it was cram-full, not less than 5,000 people filling every seat everywhere—Oh! the heat was awful. 'The business began (but I had previously been at a Committee for nearly an hour) with Virchow's address, very clear and generous and much to the purpose: and then came a series of speeches by three or four officials of the government or of the city, and by eight or ten representatives of different countries, of whom I was one, and the heat was steadily increasing, and handkerchiefs becoming wet through, and faces utterly sad and weary. Then, after some formal elections, and another address from Virchow, the meeting was 'suspended' for twenty minutes, and a vast number rushed-out to get some food at the stalls and counters attached to the Circus; each of us 'grabbed' some veal and bread and beer, and consumed them as we could; and then some of us went back and heard an excellent paper by Lister. It was a strange mixture of science and utter heat and confusion: the mental and the material elements were in wide contrast: but it could all be enjoyed. *Aug. 7th.*—All has gone on well, spite of such confusion as has far surpassed, so far as I know, any that we had in 1881. Many have been most kind and hospitable; none more so than Dr. Fränkel, with whom we dined to-day, about 80 gentlemen and 20 ladies, and drank more toasts and clinked more glasses than ever I heard before. And then we came to a big ball here—one of four, all given this evening. . . . But I long to be with you all again.

His holiday, after Berlin, was at Robin Hood's Bay, in Yorkshire; near his friend Mr. Cooper, Sir Astley's grand-nephew. 'Such a contrast from Berlin!' he writes, 'such a blessing to be able to enjoy two so opposite conditions of living! and to find in each a refreshment from the fatigues of London work.' He adds that he and his grandsons have found sun-dew on the moors—'our *Drosera* has eaten and digested well. And yesterday I caught one of the swiftest of lizards, and repeatedly hypnotised him—to the boys' great wonder, and my own much greater.' On Sept. 21st, he writes again:—

I ought to have written to you before, but I am always very idle in mind during holiday-time, and in this I become worse as I grow older. I am constantly conscious of decreas-

ing readiness and fitness for mental efforts; but it is very hard to resist and bestir myself, and I can see that in some respects inactivity during old age is prudent . . . Every day, we have heartily enjoyed ourselves, and have had as happy a holiday as any in our lives. I have never seen within the compass of ten miles so rich a variety of cliffs and moors, ravines and cultivated land, as we have around us—or, rather, half-around us, for on one side of us we have the glorious sea, always changing.

On Oct. 4th, he gave an address at University College, Liverpool [1]—saying, as he always said, that science and practice must be held together, and that neither of them, without the other, enables a man to do his best in his profession:—

The whole of this talk of the incompatibility of science with other subjects is really sheer nonsense. If, as I contend, every one is bound to do his best for others as well as for himself so long as he lives, and if, to this end, he ought to be always gaining knowledge, then he must cultivate, now and always, and in scientific study he may best cultivate, the power of careful observation and the power of cautious thinking. In ordinary talking, men seem to think that careful observation is one of the easiest things in the world; and there are some who speak as if they themselves had never overlooked anything of importance. Study the history of any science, and you can see evidence of the difficulty of observation on every page. It would be a very useful book, I think, if some one would write not a history of discoveries, but a history of oversights.

On Nov. 18th, he writes to his brother, recalling old times. His brother had sent him his own letter, that he wrote in 1836, when he was a student in lodgings in Thavies Inn:—

I am immensely obliged to you for letting me have that old letter. I had so completely forgotten all that is told

[1] He writes, in December, to Sir Henry Acland, 'I shall gladly send by to-day's post a copy of the Liverpool address. I would have sent it before, but that I thought the address a very poor one—retaining in my mind the discomfort concerning it when, a few hours before speaking it, I found that the audience was not to be, as I expected, all medical, but a various large company of men and women cultivated in all possible methods, and including many to whom the intended medical talk would have been unintelligible—perhaps indecent.'

in it, that it reads like a piece of hospital-history written by some one else; yet it reminds me of dear Johnstone and his happy friendship, and makes me remember him more clearly, and think again of the strange variety of men among whom one had to work, and on whom, some years later one's career in life seems to depend. It has made me laugh and made me think. Again and again many thanks for it.

1891.

In March 1891, he published a short account, in *Nature*, of M. Pasteur's life and work: and on April 13th M. Pasteur writes to him:—

Cher et très vénéré confrère—Dans mon ignorance de la langue anglaise, à peine avais-je reçu le numéro de *La Nature* du 26 mars que tout de suite je l'ai envoyé chez un traducteur. Malheureusement le brave homme est tombé malade, et c'est depuis deux jours seulement que j'ai pu lire vos pages si obligeantes pour moi et qui m'ont rendu tout fier. L'homme est sensible à toutes paroles d'éloge, d'où qu'elles viennent; mais quand elles partent d'un maître placé au premier rang de la renommée par le talent et le caractère, ce n'est plus une simple satisfaction que l'on doit éprouver, c'est un véritable bonheur. Tel est le sentiment que j'ai partagé avec ma femme et mes enfants; et quelle joie pour moi de voir les études microbiennes appréciées par un homme tel que vous et grandir chaque jour dans tous les pays du monde civilisé. Nous ne sommes cependant qu'au début des bienfaits qu'en retirera l'humanité. Excusez-moi, cher et vénéré confrère, d'emprunter pour vous écrire une plume amie. Ma main se fatigue promptement à écrire. (*In his own handwriting*)—Je veux néanmoins vous prier moi-même, d'agréer pour vous et Mesdames Paget l'honneur de mon profond respect. Encore une fois merci de tout cœur. L. PASTEUR.

In April, he was called to Rome to see a patient: it was his last journey abroad, his only sight of Rome, and the longest, and one of the last, of all his country-journeys. He writes: 'I could not have imagined a week ago that I should be writing to you from Rome; yet here I certainly am, thank God, and am well, and yet not enjoying myself; for the unhappiness of being here alone is greater than the happiness of seeing things which, if any of "mine" had been with me, I should have been more glad

than I could have expressed in seeing. I now want more than anything to be at home again. However, I may be in a very wrong mood—and now I am in a hurry.'

This year, on the occasion of Prof. Virchow's 70th birthday, he was Chairman of the Virchow Testimonial Fund: he also contributed a paper 'On Scientific Study in the Practice of Medicine and Surgery' to the three volumes of the *Festschrift* in Prof. Virchow's honour.

His summer holiday was at Sidestrand, near Cromer; he writes to one of his sons, who was prevented from being with him:—

Of course you cannot leave. God grant you great happiness. And we will hope for a very prosperous Christmas holiday, for which, indeed, there may be no better place than London. I can hardly be sorry that you are so hard at work: for, next to complete holiday, I doubt whether anything can be more full of pleasure than is constant occupation in some study requiring one's exact attention, and full of questions which one may hope to solve. I say 'complete holiday': and in this I should always include some willing study, such as I have now of the decay of leaves, which I am glad to find is in its extent enough for years and years of work.[1] I hope your friend will come and see us; but he has 'gone in for golf,' and is in full dress for that pursuit, which is abundantly provided-for by links and tents and mild drinks near Cromer.

His letters this year to Sir Henry Acland tell of the deaths of friends: he writes of Mr. John Marshall's death, 'It is indeed a sad event; a sad addition to the losses we have had in the last year.' In May, he writes: 'You have no doubt heard of the death of our dear old friend, Henry Monro. It is all very sad; three of my oldest friends and pupils have died in the last three weeks —Martin, Christie, and Monro. God help me to fulfil the purpose for which I have been left—whatever that may be.' At the end of the year, he writes:—

Dec. 26th.—I wish that you had less work to do, or at least less anxious work—and I might justly say the same for myself

[1] On Oct. 1st, he writes less happily—'As for the decaying leaves, my ardour has been nearly quenched by finding that I said and published ten years ago all that I was now thinking must be new. This is the worst result of my bad long, though good short, memory that I have ever known. However, perhaps I may find something new even now.'

as to quantity of work. But how hard it is to give up, or to find examples of happy retreat. I suppose it is best to go on—unless one could be sure that the time taken from the business of this life would be well spent in preparing for the next, or that one had not even now time enough for this if only one would use it well. May God help us. He can make us safe in either work or rest. The great event of Christmas was surely enough to bring ample help to all who will faithfully seek it.

This year, he published the work of his old age, his 'Studies of Old Case-books.' These essays, that are so easy to read, were very hard to write. More than one of his assistants had tried, at his request, to 'make something' of his thousands of notes, and had failed; so at last, when he was more than 70 years old, he did it himself. In the Preface, he says:—

Few things of the kind seem to be more useless than old case-books. To the writer himself they may have some value and even great personal interest; he may profitably study himself in them, as well as some of the facts which he has recorded. But to others they have no such utility. It would be difficult to find an instance, during this century, in which the old case-books left by even the best observers in our profession have been of any use to their successors . . . I ought, perhaps, to have been content with the good service that my case-books have rendered to me, and with the hope that they have been, in some measure, indirectly useful to others But I hope that what is here gleaned from them may serve some good purpose, whether in the description of a few diseases or injuries not sufficiently well known, or in the suggestions of probably useful lines of enquiry, or of some general principles which it may be well for younger men to bear in mind and test as to their probability. Perhaps, even, they may have an admirable result, if they provoke some of my contemporaries to do similar but better work with their old case-books.

Some of the essays are on subjects that had always been of great interest to him: for instance, periostitis after strains; and diseases of structure due to disturbance of nerve-force. Another, 'On an Irregular Pulse,' is concerned with the intermissions of his own pulse, which he used to watch with amusement. And there are three,

that are admirable examples of his lighter style of teaching—the essays 'On Spines Suspected of Deformity,' 'On Errors in the Chronometry of Life,' and 'On the Use of the Will for Health.' Some part of them may be quoted here, to illustrate his manner of writing, and his own rules of life:—

1. *On Spines Suspected of Deformity.*

Among the fears of disease for which one is consulted, none is more frequent than that of lateral curvature of the spine. These fears are felt, especially, by mothers among the richer classes; and usually the fear is only for their daughters' spines. It is thought essential to the welfare of a young lady that her spine should be straight, and her form not notably unsymmetrical, and that she should habitually sit upright with her back unsupported. There is no such thought for young gentlemen, and it appears to be, chiefly, a consequence of this difference, that in the well-to-do classes lateral curvature of the spine is at least twenty times more frequent in girls than in boys. For mothers seldom look at their sons' spines; and they let them sit with their elbows on the table, loll back in their chairs, and lie flat on their stomachs, and do many more such prudent things as in the daughters would be deemed shameful. Thus boys' spines grow straight; the muscles helping to support them are not over-tired, or, when they are, they can be rested in any comfortable posture. . . The folly and the mischief of this contrast are happily becoming known: the good rule of letting girls grow up like boys is becoming more and more widely observed,[1] and a larger proportion of them are well-formed, graceful, and strong. Still, the unfounded fears of deformity of the spine are far too frequent, and they are maintained, in many instances, by the existence of slight deviations from the supposed pattern-shape which are quite harmless. It seems to be assumed by some that all spines

[1] If some delicate little girl were brought to him for advice, who wanted more exercise, he used to say, 'Bring her up like a boy,' or, 'Teach her to play cricket with her brothers.' He liked children to have open-air games and free play, not drilling and formal gymnastics: he believed that they made better use of their muscles if they were left to themselves. In the same way, he believed that short-sighted children needed only to use their eyes harder, and he hated seeing them in spectacles—'I would as soon see one of my children in the streets in splints as in spectacles.' From this conviction, that natural unrestrained energy is more useful than training and strict exercises, came his indifference, almost contempt, for athletics: moreover, he rather grudged the time that was spent over them. But, toward the end of his life, he thought more highly of them.

should have curves and other characters exactly similar to those which are seen in artists' models or in anatomical plates. It is much more probable that there are as many varieties of healthy spines as of healthy chins or cheeks, or as many in the human species as in the horse or ox.

2. *On Errors in the Chronometry of Life.*[1]

The changes which are natural in old age, and which when uniform end in natural death, often begin at different times in different parts and make unequal progress . . . . and, as people of the same age according to the register are, in many instances, of widely different ages by every other test, so is it with the several organs of the same body. For all the purposes of life, some parts may have grown old much faster than others; some may even be dying as of old age while others are still fit for active life; and these dying parts may never have been the seats of any morbid process; their errors may have been only chronometric; they have too quickly become 'grey.' . . . I venture to think that our pathology and, sometimes, our practice would be improved, if local defects of working power were more often thought of as errors in the time-rate of life in the defective parts; if we would think of the 'age' of each part as not always wholly or exactly expressed by the time that has elapsed since it was first formed; if we would bear in mind that any internal organ may deviate from the general time-rate of the body, as much as the teeth, the hair, and the skin, which we so commonly think of as old before their time . . . . I think that we may thus explain, or, at least, may thus express, some of what are deemed diseases of old age.

3. *On the Use of the Will for Health.*

It may often be observed that not only the signs of some diseases but their progress and issue may, in some measure, be determined by the patient's will; I mean not only by the will to live prudently or unwisely, but by the direct influence of the will on sensation and motion. The subject may be studied in, at least, three sets of cases; some show how the will, by acts of attention, can affect the clearness and intensity of pain and

[1] This essay is founded on his Croonian Lecture (1857) and on his lecture at the Royal Institution (1859) on 'The Chronometry of Life.' He loved to observe the chronometry of life in the process of the formation of scar-tissue, whereby ripe fruits separate themselves from the branches: he was delighted when somebody said to him that 'Newton only saw half the facts of the case, when he saw the apple fall to the ground.'

other morbid sensations; others how it can control the movement of muscles generally involuntary; others how it can, at least in some degree, determine the methods of some of the processes of organic life. And in every set of cases illustrations may be found of the power of the purposely-educated will to prevent or remedy the defects due to its natural or permitted weakness. . . .

It is with pain as it is with sight or touch or the muscular sense, or, for example, with hearing. As some persons have, naturally, 'an ear for music,' so have some, and often the same persons, a very fine sensibility to pain; and, as one who has habitually and very earnestly directed his ear, *i.e.* his auditory nerve-centre, to the discernment of sounds becomes, in time, keenly and without conscious effort sensitive to even the least sound or the least variation of a tone, so it is with some in regard to pain. With almost constant direction of the mind they increase every pain, and even find or insert pain in places and conditions in which one less exercised would not feel any. And this goes on till they become able, without conscious effort, to observe the least deviations from natural sensation, and almost wholly unable to distract the mind from them. . . . A lesson for all whose sense is quick for pain is that they should strive for such control of will as to be able to divert the attention, as much and as often as possible, from the watching of pain. For pain expected, watched for, long thought of, or talked of, will come: it will come in or from the nerve-centre and may be as bitter as any from the nerve-ends. Any real pain that is often described by one who feels it is thereby nurtured, and the power of discerning it is being made stronger; and, conversely, the longer and the more often the attention can be diverted from any pain, the less does the power of discerning that pain become, just as the muscular or any other sense, when out of practice, loses some of its cunning. And patients should not trust to others for this distraction; they should educate their own wills so as to be able to direct their attention to whatever may be for the time best. . . .

The half-involuntary organs are good servants, but very bad masters; and the more they are indulged the more peremptory do they become. They should be educated to subserviency; and the earlier in adult life that their education is begun, the better it will be. If they are fairly healthy, any one with a resolute will may easily teach them. . . . It is common to hear healthy people say, and sometimes as if it were praiseworthy,

that they cannot sleep on this side or that, or without a pillow or some such help. In some of these there may be just reason for their defect, but in the greater number it is a mere habit grown out of a want of the will to resist some discomfort. If such people would resolutely pass some hours, or a night or two, without sleep, sheer fatigue would insure them sleep in any posture whatever. And others, many of whom are healthy, tell that, unless they have their meals at regular and fixed times, they cannot digest them. There are few of those who may not safely resolve that they will not fix the times, but will breakfast and dine whenever they please or when circumstances make it most convenient. Their digestive organs will submit to their wills, if their wills do not submit to them. . . . That is not completely good health which cannot endure any disturbance from the usual habits of life. I wish there were as much ambition for really good health as there is for athletic strength or bravery.

The following letters are the last that he wrote to his brother :—

1. *Jan. 11th,* 1891.—I thank you very heartily for all your loving good wishes on my birthday. They have helped to make it a very happy one—far more happy than years ago I could have thought possible. You are very good to tell of work that I have done and that has prospered; but I do not forget, and will not, that none of it would have been possible if your generosity and guidance had not given me a good start.

2. *Victoria Hotel, Yarmouth, Aug. 31st.*—I wish that you would come and spend a Sunday, or a Saturday to Monday, here. I would come with you at any time: but it would be best before November—the earlier in October the better, so that we may see trees with their foliage. I cannot tell the deep interest with which I have quietly gone about the old town, seeing as many as I could of the best-remembered places, walking through many of the old rows, trying to find traces of the old resorts. Much of the interest is distressing, but only little of this is bitterly so: the distress may be calm and helpful. The town in its social and commercial aspects is indeed very sadly lowered: scarcely a house on the Quay now appears as a private residence, and the great ships and ship-building yards are gone. There were four or five large timber-laden barques in the river, and these were all Norwegian—the town itself, a man told me, has not a ship big enough for that trade. And as

for the beach to the North of the old jetty, it is worse than even Margate is reputed to be. Still, while so many things are changed to what for us must seem to be the worse, there are some changed for the better: and especially the old Church, which now certainly surpasses any parish-church that I have seen, not only in size, but in beauty and good order and the admirable method of its services. And still some other things are in better order than they were: the old town-walls are more widely shown, and some remains of the Grey-friars' monastery, close by 'Bowles's School'—and the old Tolhouse. Do think over this, whether we might not have a day together, alone or with any you would like to be with us.

3. *Dec.* 22*nd.*—I am very sorry to have lost the pleasure (of coming to Cambridge) which I hoped-for to-day; but I could not have it. We have been all day in one of the worst fogs I have ever seen. When I got within 100 yards of the station, there was a dead block of carts and waggons and cabs, all in the dark, and not a chance of getting-in in ten minutes. So I walked, and then stayed and stayed . . . . and I seemed helpless, especially when I had to think of the chances of getting home at night. So I gave in. But let me write my heartiest good wishes on your birthday—my earnest hope that you may still and always have health and great happiness for what you and I may call many years—and then, and for ever, much more.

1892.

In October 1891, the two brothers had been at Yarmouth together. 'It was a singular pleasure,' Sir James writes, 'to walk about at leisure with him, and, with mutual help, to call to mind the old scenes and the old people of 60 or 70 years ago, and to think of the changes, not only in the town, but—so far as we know it—in the world, that the time has brought about.' On Jan. 11th, 1892, Sir James' birthday, they had dined together at Harewood Place. On Jan. 16th, Sir George fell ill, and died on Jan. 29th, in his eighty-third year. The first part of the funeral service was in Caius' College Chapel: his body was brought by the Gate of Humility to the Chapel, and from it by the Gate of Honour. His brother, writing to Sir Henry Acland, says:—

He was, indeed, admirable in all his life, and those most near to him might well think him faultless. He was, for many

years, the main stay of the whole family; the only one who had power to help the rest. But for him, I doubt whether I could have studied my profession, and yet, in all the years that have since passed, I have never heard a word or seen a look that could remind me of my deep obligation to him. His end was like his whole life—gentle, pious, watchful for the happiness of all around him—just such as one may wish to imitate with truth.

In July 1892, Sir James Paget attended the grand Tercentenary Festival of Dublin University, as Delegate of the University of London; and had the honour of speaking for 'Great Britain, and her Colonies and Dependencies,' at the presentation of addresses by Delegates representing seventy-four Universities and Academies. His summer-holiday this year was at Tan-yr-allt, a house near Penmaenmawr that had belonged to his brother; afterward, with his eldest son; finally, a driving-tour in Hampshire—'going where we please, as we please, without question or control, as free as vagrants'—and a few days in Cornwall. From Penzance, he writes to one of his sons:—

I have been again asked to take part in the discussion on vivisection[1] at the Church Congress: this time by Sir Andrew Clark, who promised to ask me. But I shall not change my mind. The more I think of it, the more am I sure that it is a great error to allow one Congress to discuss what it deems the wrong-doings of the members of another: and that the error will be especially great if clergymen discuss the practice of medical men, who can at once retort by discussing the practices and beliefs of different classes of clergymen, with reference to their influence on health and the development of the race. The discussions on both sides might probably contain a good deal of nonsense: but they would be full of mischief. *Oct. 15th.*—I hope you will not think that I am beginning to love publicity because my name has lately been appearing in the newspapers. I have let it do so as seldom and as gently as I could: but it was impossible for me among many friends to appear indifferent to the vivisection-question which some of the clergy, chiefly Bishop Barry, were so foolish as to raise. It will be quiet, I hope, now for some time: certainly, I shall

[1] He was Vice-President, and Chairman of the Executive Committee, of the Association for the Advancement of Medicine by Research.

be; and I can safely plead that I am too old for controversies and am happy in hating them more than ever.

1893.

In January of this year, he had to face the sudden dangerous illness of his second son, at that time Dean of Christ Church. He was present at the consultations, but could not bring himself to take part in them; and, for the greater part of each day, cared only to be alone in his room.

On April 13th, Lord Derby writes to him, only a few days before his own death, of their work together as Chancellor and Vice-Chancellor of the University of London:—

I was not and am not surprised by your note announcing the intention to take less part than before in the work of the London University. Under all the circumstances, it is natural and reasonable: but it is not the less a misfortune to us, and one of the heaviest that we could undergo. What happens to me is of less importance: but within the last few months my health has failed, and I have been, and for some time shall continue, unfit for the discharge of public duties. Whether this condition will involve the necessity of resigning a post the duties of which I cannot fulfil, is a question to be asked and answered: and I am afraid the answer will have to be in the affirmative. But we need not decide to-day.

His summer-holiday was partly at Tan-yr-allt, partly in the cottage at Hampstead, belonging to his friend Sir J. Russell Reynolds, that was afterward occupied for a time by Mr. and Mrs. Gladstone.

He writes to Sir Henry Acland, this year, concerning the registration of nurses:—

I think it is only a question whether it is to be granted at once or a few years hence. The test of 'character' is not really applied in the registration of any class of educated persons, unless it be the clergy. It might have been fairly talked-of thirty or forty years ago; but it is becoming absurd to say now that it is necessary for nurses and not for medical men. Here is an example—one of Rolleston's daughters is now a sister at St. Bartholomew's: why should her 'character'

be asked for more than her brother's was when he was registered? And such cases are common. Many brothers become doctors, or dentists, and are registered: their sisters become nurses, and are not registered. Or in the same family, one sister takes a medical qualification and is registered, another becomes a nurse, and she cannot be registered. The contrast is becoming ridiculous as well as unjust, and must soon come to an end. . . . I should be 'for' registration; but am much more 'against' being induced to attend a meeting about it; the older I grow, the more I dislike speaking.

In September, he left Harewood Place, and moved to 5 Park Square West, Regent's Park: a smaller house, with a brighter outlook, more like the 'little cottage with a big garden' that my mother always wished for. He, though he loved holidays, had no desire for country-life: in the earlier years, he used to say that he would like to spend his old age somewhere in Bloomsbury near the British Museum;[1] and he carefully considered and declined more than one proposal from his brother that he should take a country-house. He did not put his name on the door of the new house; but he saw the few patients who came there.

On Sept. 3rd, he writes from Harewood Place, 'All, thank God, are well here; and the plans for moving are not without some amusement. It is surprising to find how much of what one has is not worth having.' On Sept. 28th, from Park Square West, 'All looks well here, and we hope we may find the brighter air and prettier outlook really refreshing to your dear mother. She can still find that she is in a kind of centre to which all whom she loves best can often come.' The old house stood empty when he died; and soon afterward it was pulled down. My mother's letters recall days of his life there:—

. . . This afternoon, he has a long meeting of the Shrewsbury School Governing Body, one at St. Bartholomew's, another at the Medical Council, another at the College!! It is almost sad—but he laughed as he went out, and told me to leave his paper written so that anyone who wished might see how he

[1] In the later years, he was of the same mind: he writes in 1892, of an old friend who had retired to the country, 'He has a charming house with garden and many acres of land, and is in some measure enjoying his retirement, but not enough to make me envy him, or to make me think that a retirement into the quiet of London would not be far better.'

is occupied to-day. All next week will be worse still, I fear. We really are an industrious old couple. I believe we all work too hard, but we shall never mend now.

. . . He got to bed at 3 yesterday morning, at 2.30 this morning, has a long meeting at the Medical Council this afternoon, another on Monday—he is so tired.

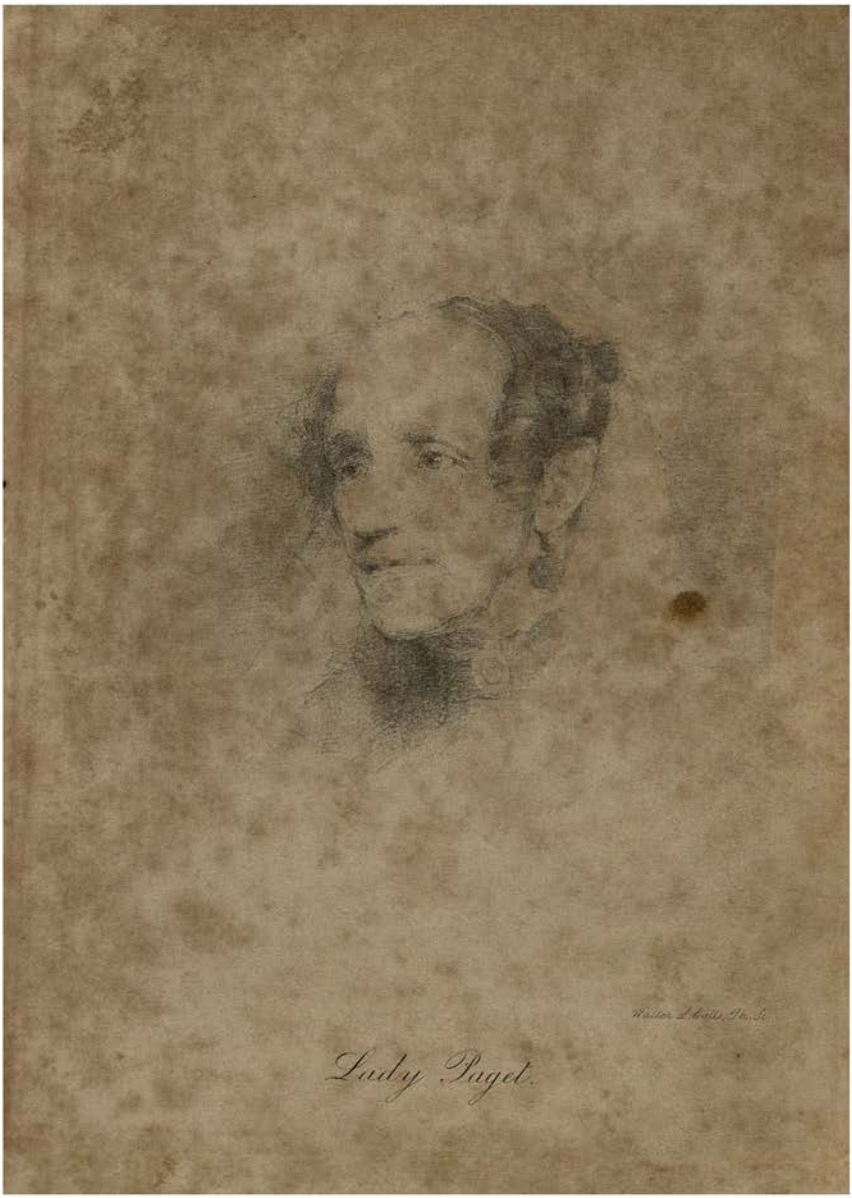
. . . I do think we had better start a *genteel* moderate hotel—our house is a queer one at times.

. . . Next Monday he ought to dine at the Literary Club, Tuesday The Club, Wednesday with the Prince of Wales, Thursday the United Hospitals dinner! However, he declines Monday and Tuesday.

. . . They did get to St. James' Hall last evening, and his enjoyment seems to have been perfect of Bach and the other music, but Bach pre-eminently. The usual penalty had to be paid of getting to bed at 2 on Sunday morning, but even this did not make me regret the happy break away from work for once. To-night Grillion's, on Thursday dinner at Sir W. Gull's, and Saturday, if you please, a dinner out to meet Mr. Gladstone, Mr. Lowe, and others! Quite his own wish to go.

And if, out of the many hundreds of her letters to her children, one letter can recall herself, it is this:—

Oct. 9th, 1880.—Forty-four years since we were engaged! and forty-four years it seems, I must own, with its crowd of untold blessings, the times of sore trial, the poverty, the riches (comparatively), the times of weariness, the elation of feeling rested, the onward progress of our most dear children, the many loved ones gone, the far greater number spared to our exceeding joy, the many changes that have marked our lives. And what a strange thing, in this imperfect state of being, to be able to speak of one's having more gentle love, more confidence, more sweet dependence on one, than ever. The long years have not worn all these great sources of joy out, but the stream of even, mutual love seems uninterrupted. May God so grant us peace to the end, and then order all things mercifully for us, that our end may be according to His will, 'free from sin and shame and, if it be His pleasure, free from pain,' or such pain as shall disturb or distress those around us.



Lady Paget.

VIII

FRIENDSHIPS.

It seemed impossible, in editing these 'Memoirs and Letters,' to do more than write of Sir James Paget, and of him alone. In the hope of giving a clear and distinct account of his life, free use has been made of his home-letters, and of his letters to his brother: for these are all that is left to describe his life from year to year. The result is, that a great deal has been said of his home-life, but very little has been said of his friendships. Among those friends whom he outlived, were Gladstone, Newman, Pusey, Ruskin, Tennyson, Browning, George Eliot, Lowell, Dean Church, Lord Herschell, Tyndall, Huxley, Flower, Pasteur, Darwin—and something may be said here, without offence, of what he was to his friends, and of his life in society.

It is part of the recompense of his profession, that it makes friendships of singular excellence; not out of gratitude only, but out of the good-will and admiration that are given to the work of a good physician or surgeon. But, beside the gratitude and the admiration that came to him in this way, there were other distinctive personal qualities in his social life. He was very proud of his profession, and proud of his own hard work for it and in it: he never dreamed of being above it, or of going outside the limits of it; and its service was perfect freedom to him. This pride in his calling—*this spirit of order, this hearty acceptance of a place*—gave intensity and singleness of purpose to his life in society. He was what he was to his friends, chiefly because of his love of his own profession and its work. He did not, in the later years, still give the name of 'business' to it; but he had no great respect for men in it who were not 'business-like.' He was inclined to regard music and books and art as

'recreation' or 'relaxation'—as the best and highest help in practice, but not as a recommendation in it, or as a substitute for it, or as a consolation for the want of it. He so loved work, that he tended to estimate his friends in his profession chiefly by their daily output of it, and to think rather less of them if they said they had no time for this or that, or did nothing for science. He said once, 'You may excel all men, if you can, either in virtue, or in the amount of work that you do; but in everything else you ought to be just like them.' He said also, that no man ever did good work who was not frequently overworked. His love of work, and of his professional life, was in keeping with his distrust of untried schemes, his hatred of controversy, his indifference toward politics and many questions of general interest, his scrupulous care not to do anything, even for the sake of hospitality, that might be thought 'obtrusive, self-asserting, or so far beyond a fair occasion as to be absurd,' and his resolute avoidance of giving positive opinions on subjects outside his work. And, on the whole, he did not go into society to get away from his work, but rather counted it as part of his work to go into society. Yet he heartily enjoyed his social life: he delighted in expert talk, and liked all talk that was unaffected and to the point– he had no liking for 'symposia,' or for superficial agreement between men opposed over first principles, and hated off-hand arguments about religion and philosophy, and would sit silent during them, hardly looking up. He loved hospitality, and was, like his father before him, 'bounteous in prosperity': and he never despised, or pretended to despise, pleasure.

Of those friends who knew him when he was an apprentice at Yarmouth, or a student at the Hospital, there remain Sir Joseph Hooker, Sir Thomas Paine, and Mr. Luther Holden—*floruerunt et floreant*. Among his friends, a year or two later, were William and Edward Ormerod, who entered the Hospital in 1835 and 1838: and his account of their lives, in the Hospital Reports for 1873, shows the strength of this friendship, and what he most admired in men of his profession. Those members of the staff, who gave him help in his fight for a place among them, were chiefly Sir William Lawrence,

Dr. Latham, and Sir George Burrows; and it is probable that Sir George Burrows, by his wise advice to him in 1836 and 1838, kept him at the Hospital. Other good friends, about this time, were the editors for whom he wrote so hard; and, among men of science, Carpenter, Marshall Hall, Bowman, and Sharpey; and, on the Continent, Vrolik, Kölliker, and Rokitansky. Among consultants, Sir Thomas Watson and Sir James Clark especially helped him; among practitioners, he has named in his Memoirs Mr. Edgar Barker and Mr. Herbert Evans; and to them should be added the name of Mr. John Mawdsley. Finally, the honoured names of three of his oldest living friends must be commemorated —Miss Nightingale, Sir John Simon, and Professor Virchow.

One of the earliest friendships that he made in practice came back to him after many years. In 1885, at a dinner of the Fishmongers' Company, he proposed the health of Mr. Beckwith, the Prime Warden. Mr. Beckwith, in his reply, told this story—that many years ago a boy, the son of a poor clergyman, was living in London, and was ill. He did not know to what doctor to go, and consulted his landlady. She said she did not know much about such people, but she had heard there was a young doctor, a young Mr. Paget at St. Bartholomew's Hospital, who was clever, and would probably see him without taking a fee. He went to this young Mr. Paget, who certainly seemed clever, and anyway cured him. And when he offered to pay, Mr. Paget said no—he sometimes did not take fees from clergymen, and might also decline to do so from their sons. 'But,' said Mr. Beckwith, 'I never thought I should come to be one day Master of the Fishmongers' Company, and to thank Sir James Paget for proposing my health.'

Among the earlier associations that came in practice, were those with Lord Palmerston and Mr. Babbage. He found that Lord Palmerston was in the habit of standing at a high desk to write, and advised him to take more rest: and Lord Palmerston told him that, when he was made Under Secretary of State for Foreign Affairs, he found so much to do and was so much overworked that he used to fall asleep while he was writing at a table: so he took to standing, because, 'if he fell down, that woke

him.' He told him also, that he found the best way for speaking in the House was to let the beginning depend on what the previous speaker had said, to let the middle depend on his own knowledge of the subject, and to have the end carefully prepared, so that it might come at any time with a good grace. Of the friendship with Mr. Babbage, there remain only two letters, one giving an account of his calculating-engines, another with a characteristic postscript—'If any experiment can be suggested as to the question whether chloroform acts on the nerves which convey sensations of pain, or upon those which contribute to memory, I shall be glad to relieve the tedium of the operation by endeavouring to attend to them.'

There are not many letters left to tell of his long friendship with George Eliot.[1] He put her far above all the writers of her time, except Tennyson, and delighted in 'Romola' and in 'Middlemarch' past all telling. She used to send him her books; and the coming of each number was a great event, that made him break his rule of constant work. She wrote to him once in trouble over a very small inaccuracy in 'Middlemarch':—

Dec. 7th, 1872.—Since I saw you, a medical man at Ealing has written to me to express his regret that I have 'blotted' the correctness of my representation of medical subjects, by speaking of Lydgate's 'bright dilated eyes' in such a connection as to imply that an opiate would have the effect of dilating the pupil. It is a piece of contemptible forgetfulness in me, that when I wrote these passages I had not present in my mind the fact which I had read again and again—that one of the effects of opium is to contract the pupil. What I had in my mag nat on was the appearance in the eyes which I have often noted in men who have been taking too much alcohol, and who are in the loquacious, boastful, or quarrelsome stage. I am unhappy, as you may imagine, about this said 'blot.' And what I wish to ask of your goodness now is, to tell

[1] My mother writes, a few weeks after George Eliot's death—'The more one thinks of her, and her deep affection for your father, the more one feels how she stood alone, amid the many friends he has won. I never can think of her without a strange feeling of jealousy over her, a kind of true regard and admiration I can't describe. She was so gentle, so generous, so affectionate, so charitable in her spirit towards others.' He wore, for many years, a long gold watch-chain that had belonged to her.

me whether you think the matter grave enough to urge my cancelling the two stereotype plates (certainly no great affair) before any more copies are struck off. I am sure that your sympathy is large enough to take in this small trouble of mine.

His friendship with Lord Tennyson, whom he attended, was a very great happiness to him. In his old age, he said of himself that he had 'no proper appreciation of poetry—no intense enjoyment of it, such as many men have': but, in his early life, he did intensely enjoy Keble, and, in his later life, Tennyson. He said once, that he would sooner ave hwritten the 'Christian Year' than have fought the battle of Waterloo. Keble and Tennyson were his chosen poets, it might almost be said that they were his only poets: and, of all his books, he most valued the poems sent to him from time to time by Lord Tennyson himself. On the memorable evenings when Lord Tennyson came to Harewood Place, and afterward read aloud 'Maud' or 'Harold,' there was the utmost reverence, and almost nervousness, in my father's welcome of him. But he was not afraid to remonstrate with him over his poem 'In the Children's Hospital'; and his remonstrance was taken very kindly. He was to have stayed at Aldworth in the spring of 1892, but something prevented it: and, in the autumn, he bore the pall at Lord Tennyson's funeral. On Oct. 30th, he writes of the last volume of the poems, sent to him by the second Lord Tennyson, 'Some of them seem to me singularly beautiful, as brightly descriptive as any that he has written, and some, I think, with more real solemnity of thought than ever before. But I cannot attain to any full appreciation of poetry: I have had to read and write too much of plain descriptions, too many catalogues.'

His friendship with Mr. Browning was made and maintained in the happiness of having many friends in common with him. Some of Mr. Browning's sayings were treasured-up, many years ago, and may without offence be recalled here. Talking of autographs, he said that George Eliot and he were not agreed as to the giving of them. She used to refuse them, he used to give them: but he drew the line at a request for an old necktie, from somebody who was constructing a quilt

out of great men's neckties. He talked also of music—how he had been in Venice at the Teatro Rossini, hearing one of Paiesiello's operas, and had seen Wagner there, and had thus associated himself in one evening with the representatives of three periods of opera: and of his early love and study of music—how he had settled he would be a musician; and then had thought he would be an artist; and finally had decided to give up music and art for what he had 'tried to do' in poetry. He had profound knowledge of old Italian music; and so great veneration for Bach, that he once recommended Bach's *Crucifixus—et sepultus—et resurrexit*, as a cure for want of belief. He spoke also of his life-long friendship with Lord Tennyson; and said that when stupid people thought to please the one poet by calling the other obscure, Lord Tennyson 'put his great foot down on them.' Mr. Heywood Sumner writes, recalling an evening at Harewood Place:—

I can now see your father, with Browning on one side, and Romanes on the other, telling stories about the appearance of the stigmata—(there had been a girl in Belgium who had attracted much attention by her claim to this manifestation)—then, about blushing—then, about electrical fishes—and, last, a story of Browning's, of a girl in their lodgings somewhere in Italy, who they found regularly stole their tea, which they bore with, but rebelled when they found that she likewise stole their candles, yet were mollified when they found out that she stole their candles in order to burn them before a little shrine in expiation of her sin of stealing their tea! These are some of the settings in which your father's keen, firm face and quick eye still look at me.

In the summer of 1887, Mr. Browning and my father met, for the last time, at San Martino. It was a regular holiday-meeting; with Mr. Browning were his sister, Mr. and Mrs. Barrett Browning, and Dr. and Mrs. Villiers Stanford; the talk turned on Italy, and Mr. Browning told with delight how a lady had asked him 'whether he had ever been in Florence.' The news of his death at Venice, December 12th, 1889, came only a few days after my father had been planning to welcome him again at Harewood Place. At Mr. Browning's funeral, also, he bore the pall. (And the like honour

was offered to him, when Mr. Darwin died; but he was prevented from receiving it.)

For Mr. Lowell he had the deep affectionate regard that comes by nature. They were bound to be friends, made for each other. One of Mr. Lowell's letters, though it is only to decline an invitation to dinner, illustrates the good feeling between them:—

19*th. Feb.*, 1884.—If anything could add to the pleasure of dining with you, it would be that of meeting Lord Acton. He is one of the few men I have ever met, the inside of whose head more than keeps the promise of the out—and in his case that is saying a great deal. I well remember in what terms he spoke of you; and shall not say whether I agreed with him or not, because my opinion could add no weight to his. You see I am wandering from the point (like every after-dinner speaker but you)—but it is only because I would fain put off saying that I am unfortunate enough to be engaged for Thursday. I can only say I wish I weren't!

A year later, he writes in answer to a letter of sympathy, 'I thank you most warmly for your kindly words of sympathy. There is no man whose friendship I should think a greater honour, or the memory of which I should cherish more warmly.' He came often to Harewood Place; but he had a whole host of friends—he was told, by one of them, that 'the women of England would rise as one man,' if he were recalled to the United States. Among his sayings were:—

Old people don't require much sleep. And that's when a man makes verses—at least, if he is a Minister.

Don't you sing anything of mine in my presence, unless you want to get a wigging.

Théophile Gauthier could not bear the *h* in his name. He ought to have lived among English aldermen.

I have never made a good speech here. I never write a speech: but when I spoke of Garfield I prepared something, as I had to be careful what I said.

A man who can write 'in the cent*er* of the street' would be led out and burnt, if I were Archbishop of Canterbury.

He and my father were at the famous Sexcentenary Dinner at Peterhouse, when, it is said, there were thirty-nine after-dinner speeches, which lasted till near 1 *a.m.*

Sir Frederick Bramwell, who had to speak for 'Pure and Applied Science,' was content to say that he thought that the only example of applied science, which would be appropriate to the occasion, was the application of the lucifer-match to the bedroom-candle: whereat Mr. Lowell wrote the following epigram, and passed it across the table:—

Oh, brief Sir Frederick! Could but others catch
Your happy science, and supply your match!

In the world of art, my father's friendships go back a long way. He could remember Old Crome's visits to the house at Yarmouth. His long friendship with Mr. George Richmond began about 1850: and, some years later, his friendship with Mr. Holman Hunt and Mr. Horsley—*floruerunt et floreant.* His latest friendship, among artists, was made one evening in 1894, when Mr. Solomon sketched him, for a study for a group of portraits. Unhappily, this portrait cannot be reproduced here, for its value is lost in photography. Mr. Solomon remembers well how, while he was painting, my mother played Mendelssohn, and my father lay back in his easy-chair, but with tears in his eyes when he looked at her, for she was not far from the end of her life. Among artists whom he outlived, Sir Edgar Boehm's friendship, and his keen vivid talk at Grillion's or at Harewood Place, were a great pleasure to him. It is good to recall Sir Edgar's condemnation of Canova as a *misérable*, and of Thorwaldsen—'Ah, those apostles of Thorwaldsen! *They* would never have followed Jesus Christ: they would have criticized him, like Strauss.'

The name of Grillion's tells what my father most enjoyed in his social life, the utmost excellence of table-talk. One evening at Grillion's, he sat between Mr Gladstone and Mr. Matthew Arnold, and the talk turned on professions. Mr. Gladstone said that the medical profession, steadily developing and improving, was 'the profession of the future'; and Mr. Arnold said that he had been much impressed, in America, by the superiority of the doctors over the clergy and the lawyers. Another time, at Harewood Place, Mr. Gladstone met Prof. Virchow, and discussed with him Dr. Schliemann's discoveries at Ilion: another time, he met Surgeon Parke,

just returned from the Emin Pasha relief expedition, and talked with him of General Gordon's death. Of himself, he told how, when he first went to Eton, he took no interest in his work—'I always thought of lessons as something to be got through. And then, one day, to my utter astonishment, an exercise of mine somehow or other got sent-up for good. That was quite a new idea to me; I found some one did care about my work, and from that time I really gave my mind to it.' Another time, he came to ask advice about a proposed holiday in the Dolomite country[1]—and was pleased to call my father *the King of the Dolomites.*

Next to Mr. Gladstone's name, may be put the name of his physician, Sir Andrew Clark; for the sake of recording an admirable 'score' that he made at Harewood Place. He had spoken, at dinner, of the number of letters that he received during the day: and, after dinner, there were three or four letters waiting for my father, and no more. Somebody said, 'Ah, you don't get so many letters as Sir Andrew.' My father, with imperturbable gravity, answered, 'No: but then, you see, all my patients have something really the matter with them.' Sir Andrew rose to the occasion, and said, 'Yes, I perceive that several of the envelopes are edged with black.'

Among men of science, my father's friendships are past counting. Of those whom he outlived, it must suffice to name here Mr. Darwin and M. Pasteur. The one time that Mr. Darwin and M. Pasteur met, was at Harewood Place in 1881, on the opening day of the International Medical Congress: but, by the mischance of Mr. Darwin's leaving early, they had no talk together.

The letters to Mr. Darwin are those of a disciple to his master: the one desire is to collect facts and make observations for him. 'I am greedy for facts,' writes Mr. Darwin; and my father writes, in 1867, 'Pray tell me whether it will be useful for your purpose to examine the condition of the *platysma* during screaming in the

[1] He writes to my father, Aug. 4th, 1879, 'I thank you very much for your kind note. Our idea rather than project of a visit to the Dolomite country hangs between life and death: sustained by a great desire to see it, but impeded by an aversion to all active arrangements, which I find fast growing upon me. But I hope some favourable combination may lash the dull purpose into vigour.'

partial or complete insensibility produced by chloroform.' In 1869, 'I enclose a note from Lord Fitzwilliam about his horse with zebra-marks. The case seems as striking as I believed.' In 1872, 'I am at work on the nervous mimicry of organic disease: I have some hope that, during my work, I may fall on some facts which may be of interest to you, and you may be sure that I shall send them to you.' And in 1873, 'Sir William Gull has just brought me the enclosed quotations from Chaucer, as illustrations of the closure of the eyes in effort. He begs me to send them to you. I have lately seen a terrier who very distinctly frowns during mental excitement—not always with anger, but often, I think, with anxiety, as in expecting food.' Three letters (May 6th—December 3rd, 1869) are concerned with curious facts in regard to blushing. And there are eight letters (July 7th—August 17th, 1875) on the alleged re-growth of limbs or of digits after amputation; one of them is seven pages long, another eleven. The first of them, by the width of its outlook, recalls Hunter's letters to Jenner:—

July 7th, 1875.—My dear Darwin—Pardon my writing on a railway, and let me thank you for your book on Insectivorous Plants: the more at this time because, while reading it, I have been thoroughly enjoying myself in what might have been a very dull long journey. But neither my reading nor my thanks are yet ended. I am charmed with your suggestion that fairy-rings illustrate the insusceptibility of soils—whether bloods, tissues, or earths—that have been infected. I have sometimes vaguely thought so, but you make me nearly sure. I have been told that fairy-rings sometimes appear very quickly—large and complete rings appearing where no small ones were before. I do not know if this ever happens, and I must admit that my informant ascribed the occurrence to electricity; but he said he had observed it on his own lawn. If such rings are ever complete from the first, I have thought there might be mutual illustrations between them and some annular diseases which one sees in the skin. Some forms of Herpes are from the first annular: still more often some forms of Psoriasis, and of ulcers; and when these begin in rings or parts of rings, they usually extend only outwards, and if they meet they coalesce but do not cross. I will try to set some one to work this out. And, I will not forget your wish for cases of re-growths of amputated members.—Always sincerely yours, JAMES PAGET.

Another letter of the same year (May 12th, 1875) reads strangely now:—'I beg you to let me thus introduce to you Mr. Burgers, the President of the Trans-Vaal Republic. He is devoted to Natural Science, anxious to know you, and ready to assist you in any investigations that you may wish to be made in his country.' Other letters are to thank Mr. Darwin for the gift of his books:—

Jan. 29th, 1868.—I thank you, with all my heart, for sending me your book.[1] I shall refresh and teach myself with it whenever I can get a bit of time clear from the day's work. I expect to be made even more than I am now ashamed of my ignorance (and I fear I may add that of my profession too) on the influence of inheritance on the variations and mixtures of diseases. But I hope that my deeper shame may be the beginning of deeper knowledge.

Nov. 18th, 1879.—I thank you very much for giving me the Life of your Grandfather.[2] It is intensely interesting, not only as the history of a very rare life and the evidence of a greatness of mental power only now fairly estimated, but as an unmatched illustration of the transmission of intellectual tendency as well as intellectual strength. May the like transmission be continued through yet many generations!

Dec. 3rd, 1880.—Let me thank you for your note and for the great pleasure I have had in even a partial reading of your new book[3]—though it makes me feel that we must go beyond plants for a really elemental pathology. I wish I knew enough of crystal to work at them.

His friendship with M. Pasteur was a memorable part of the happiness of his later life. He was deeply touched by M. Pasteur's fortitude over ill-health, his love of home, his faith, and that passionate devotion to

[1] 'The Variation of Animals and Plants under Domestication.'

[2] 'Life of Erasmus Darwin.' In a letter to my father, July 14th, 1879, Mr. Darwin says, 'It was very kind of you to take the trouble to hunt up the enclosed old book. I have been glad to see it, as at least showing that Dr. D.'s views were attended to; and I have read it, as these old views on fever seem curious rubbish. I fear that my little life of Dr. D. will be a very poor affair, and never again will I be tempted out of my proper work.'

[3] 'The Power of Movement in Plants.' A few days later, Dec. 13th, 1880. Mr. Darwin writes to my father, 'Perhaps you would like to see a very small "tumour" on a lateral branch of the Silver Fir, caused by an Œstrum, as stated (with references) in my Power of Movement in Plants. These tumours are sometimes almost as big as a child's head. At what age they emit the *upright* shoots, I do not know.'

France which gave the air of *la revanche* to all his work after 1871. Only, he was not in perfect sympathy with his curious sensitiveness to misrepresentation and gross abuse. On M. Pasteur's side, there was admiration of my father's long record in science and practice, his *haute philosophie*, his keen following of the advancement of pathology and surgery. One evening at Harewood Place, April 21st, 1884, M. Pasteur described his work on rabies to my father, Prof. Tyndall, Lord Avebury, Sir George Buchanan, Lord Reay, Sir Andrew Clark, and other friends—speaking very gravely, and very slowly, that not one point should be missed: but his first visit was in 1881, at the time of the International Medical Congress. The address that he gave that week, 'On Vaccination in Relation to Chicken-Cholera and Splenic Fever,' with an account of the anthrax test-inoculations that he had just made at Pouilly-le-Fort, stands out like a great land-mark in the history of preventive medicine: and, in it, he spoke of my father, Lord Lister, and Jenner, in words that may have a place here:—

(1) Je n'avais pas l'intention de prendre la parole dans cet admirable congrès qui réunit les sommités médicales du monde entier, et dont l'éclatant succès fait tant d'honneur à son principal organisateur, M. William MacCormac. La bienveillance de notre vénéré président, Sir James Paget, en a décidé autrement. Comment résister en effet à la parole sympathique de cet homme si éminent? Sa personne a comme un rayonnement de bonté émanant d'une flamme intérieure qu'il sait traduire, quand il le veut, avec toute la puissance des grands orateurs anglais.

(2) Par votre accueil chaleureux, vous avez ravivé en moi le vif sentiment de satisfaction que j'ai éprouvé lorsque votre grand chirurgien Lister a déclaré que ma publication de 1857 sur la fermentation lactique avait été pour lui le début de ses reflexions sur sa précieuse méthode chirurgicale.

(3) J'ai donné à l'expression de *vaccination* une extension que la science, je l'espère, consacrera comme un hommage au mérite et aux immenses services rendus par un des plus grands hommes de l'Angleterre, votre Jenner. Quel bonheur pour moi de glorifier ce nom immortel sur le sol même de la noble et hospitalière cité de Londres!

M. Pasteur was also present at the debate on Lord

Lister's paper 'On the relation of Minute Organisms to unhealthy processes arising in Wounds.' There came a crisis in the debate: the doctrine of heterogenesis was upheld by the most eminent supporter of that lost cause. M. Pasteur could not keep silence—'Mais, mon Dieu,' he said, beating the table with his fist, 'ce n'est pas possible—jamais, jamais.' At the Inaugural Meeting of the Congress, he did not believe that the applause, at the sight of him, was for him—'C'est sans doute le Prince de Galles qui arrive,' he said.

These random notes give no account of my father's friendships with men of his own profession—especially, with Sir Thomas Smith, who was like a son to him, and with Lord Lister—or of his many friends in the United States; Dr. Gross, Dr. Gilman, Dr. Weir Mitchell, Dr. Billings, Dr. Yandell, Dr. Oliver Wendell Holmes, Bishop Phillips Brooks, and many more. Only, they may serve as a sort of prologue to the last six years of his life.

IX

5 PARK SQUARE WEST, REGENT'S PARK. 1894-1899.

1894.

THE new house, with a little conservatory, and a view over Park Square Gardens, was well suited to him: 'the quietude is very pleasant,' he writes, 'and the Square looks well, and the ferns are beautiful.' In April, he went for a few days to Yarmouth: he writes, 'To-morrow and Saturday are to be the days of the usual Easter-fair; and the square in the Market-place is already crowded with vans, travelling theatres, merry-go-rounds and the like. It will be very amusing to go among them.' On May 23rd, he and my mother kept their Golden Wedding-day. In August, they went again to Yarmouth, and then to Tan-yr-allt. He writes from Tan-yr-allt:—

I have enjoyed myself in doing nothing, and in reading more novels than in the whole of the last two years. I am indeed rather tired of them, and can hardly get on with 'Marcella,' which would be my twelfth, and, I am told, would be the best of all. I shall try again to-day, and a hard East wind without a gleam of sunshine will be in her favour.

About this time, he seemed to set himself to find pleasure or contentment in novel-reading, and was successful: he did not give up his other reading, but added to it the steady reading of a very considerable quantity of good fiction. In the years at Harewood Place, he read few novels: it would be easy to count those that seem now to recall the very sound of his voice as he praised them—'Romola,' 'Middlemarch,' 'Les Misérables,' 'John Inglesant,' 'Anna Karénina,' 'Lourdes,' 'The Strange Case of Dr. Jekyll and Mr. Hyde'—but, in his old age, he read not only such masterpieces, but a great number of good English and French novels, and with a fair measure of interest and enjoyment.

He writes this year to Sir Edward Fry, concerning the Gresham University Commission:—

February.—I wonder whether you have seen the published abstract of the Report of the Gresham University Commission. It seems so nearly consistent with the scheme which the Senate adopted, but Convocation rejected, that I think we may well be content if not perfectly satisfied with it. But how the Statutory Commission will be composed, and what it will do, may yet raise grave questions, which you may, I hope, be able to help to solve.

May.—I am very glad that you are at home again, and now I hope that you may enjoy England as much as you have been enjoying Italy. To one who has studied plant-life as you have, I doubt whether any country can be more charming than our own in the bright spring-time. I hope that good will come of the discussions in the Consultative Committee at the University, but there are great difficulties in the way. The majority, I think, in Convocation, and certainly its most active members, wish to disregard almost entirely the report of the Gresham Commission, and to obtain a new Charter, or an addition to our present one, which may retain and increase their present privileges, and be subject to no such influence or guidance as that of any Statutory Commission. There is likely to be a fierce discussion of the subject in Convocation next Tuesday, and the supposed minority, led by Thiselton Dyer, are making a very strong 'Whip'—but I cannot guess what the result will be. And, whatever may happen there, the opponents of the Commission's recommendations have, it seems, a considerable Parliamentary (House of Commons) influence. Oh! I wish that you were with us: and I quite agree with you as to the adjustments of the Gresham Scheme which should be urged on the Statutory Commission—if ever there be one.

This year, he gave his last address to students—and chose, for his last audience, the Abernethian Society. It was sixty years since he had read his paper on *Trichina spiralis* before the Society, when he was a first-year's student at the Hospital. The final advice, that he now gave, was his constant advice, that all students should keep science and practice together:—

It is often said or implied that, in our profession, a man cannot be both practical and scientific; science and practice

seem to some people to be incompatible. Each man, they say, must devote himself to the one or the other. The like of this has long been said, and it is sheer nonsense.

1895.

On January 7th, 1895, my mother died, as gently and simply as she had lived. The night before she died, she said what a strange and wonderful thing it seemed, to be dying; but that was all; she had lived so long for others that she appeared hardly to notice her own death. After it, he paid no marked outward reverence to days and places associated with her: he said once, 'What is the good of keeping anniversaries, when someone is never out of your mind?' But he began to observe more closely the signs of his old age. He did not say either that he wished to live or that he wished to die; he was careful, when he spoke of his own case, to use rather precise and technical words, as though he were bound to study it, even if it were common-place; he would say, of this or that evidence of his infirmities, that it was 'curious,' in the tone of one propounding a subject for a thesis. He could not be content without something to observe; he watched and noted every morning the temperature of the thermometer outside his window; and, in the same way, he watched his own case, with a quiet, rather indifferent air, as a matter of some slight scientific interest, that might be worth more attention than he gave to it.

In April 1895, he went for the last time to Yarmouth. He writes—

To me, each day brings strange states of mind, in the contrasts of all I see and hear with the memory of the same things from 60 to 70 years ago. Nothing is just what it was; and it is not possible to keep one's thoughts exclusively on those which have changed for the better. The sea-shore is much further off; the Roads have fewer ships in them; some of the best views are hidden by new buildings: most of the best old houses are turned into shops:—but these and other deteriorations are, or may be, outweighed by many signs of improvement, and the unfailing beauty of some of the scenery, such as that about the harbour and the rivers and marsh-lands and Breydon and the old Burgh Castle, and some others, which we

have been able to see in charming weather. And all the deteriorations are only consistent with my own, as the signs of old age accumulate and increase in me—my slow small writing, my slow and sometimes shuffling walking, my shorter breath, and many more, which, while I study them, I try to use as good lessons: may God help me thus to use them aright.

His summer-holiday was spent partly at Bude, partly with Sir Edward Fry at Failand; later, at Tan-yr-allt: 'I have had my longest holiday,' he writes on Sept. 15th, 'and shall really be glad to be at work again—less work than ever, I expect.' In October, on the occasion of M. Pasteur's funeral, he wished to go to Paris, but dared not take the risk of the journey—'I have no sign of any illness; but I am conscious of almost rapid increase of all the signs of old age: I have so often studied them in others that I cannot overlook them in myself. I am evidently quickly becoming very old, and, though my life becomes at the same rate more useless to others, I have no right to shorten it. Yet this I might do in the Paris-excursion, with its long journey, and with the great fatigue of its many meetings and many introductions, needing much effort in listening and talking.' Such letters as this, read between the lines, show that he watched his own case in the hope that he would not have to watch it much longer. In November, he writes, 'I am writing in the first of this year's November-fogs, by candle-light, cold and cheerless; and my mind matches it in dullness and unfitness for either work or pleasure, and inability to see my way to what I should like to do.' But, in December, he writes looking back to a few days' holiday, and forward to Christmas-time:—

'I cannot let pass without one written word of thanks my gratitude for the happy time I spent with you. Among all the increasing signs of decay I do not feel that of a decreasing gladness at the sight or in the thought of the happiness of one's children. I had it as perfectly as ever, though I could neither show it nor fully tell it, while I was with you. Thank God for it; and may He grant the like of it to you and to your children through a whole life at least as long as mine has been. And now I shall look forward to this day fortnight, and shall hope to see you all here, and will try to find more pleasures for you than I may be fit for an active part in.

This year his Hospital paid him the honour of giving his name to one of its surgical wards. On May 1st, when the Abernethian Society celebrated its Centenary, he was present at the address given by Dr. Norman Moore; and, as he came into the great Anatomical Theatre, received a very memorable welcome from the students.

1896.

From 1896 onward, the home-party at Park Square West consisted of himself, his younger daughter, and his grandson Michael Thompson. On Feb. 15th, he was elected an Honorary Member of the Société de Biologie. His summer-holiday was at Tan-yr-allt; and, on the way home, he visited Mr. Gladstone at Hawarden. His letters are in great part concerned with the little plans that he loved to make for the general happiness; and he speaks of himself in a few sentences only, here or there. They tell, like a diary, of the quiet passing of the year:—

Jan. 8*th.*—Poor Sir Julian Goldsmid, my successor in the Vice-Chancellorship, is dead, and I cannot help feeling as if I had not got rid of the office. I must convince myself that I have; and that I need not, for certainly I cannot, do anything of the work.

Jan. 11*th.*—Thanks to all your kindness, my birthday is passing as happily as can now be ever possible; and I will try to think of the light and God's great mercy as steadily as I can.

March 24*th.*—I have just been to the first part of the funeral of George Richmond, at All Saints'. A very old friend he was, and one very esteemed: I had known him for nearly 50 years. There are very few of us left now; but I believe there are better in our places.

April 16*th.*—I ought to have written to you sooner, but, on Tuesday evening, I had only time to answer the letters which I found requiring speedy replies, and last evening I was so utterly tired that I could do nothing—not even read Punch. For in the afternoon I had been obliged to attend three meetings, and they had lasted very nearly six hours. But now, after a happy night's rest, let me at last write to you my most grateful thanks for all the happiness that you gave me in my holiday. I never felt more grateful: my comfort was complete, my happiness as great as possible; and my gratitude is

the more because I cannot but feel that I am no longer able to add anything to the active happiness of others, or to take part in their chief amusements.

May 7th.—I think that the only thing that I have published on the 'fall of the leaf' is in the accompanying address. I wish that I could go-on working at the subject: but it is, I think, a happy natural adjustment when, as in my own case, the old age which makes one constantly less fit for original work makes one less disposed to attempt it.

Sept. 1st.—The great pleasure of our holiday is not ended: every recollection of it brings happiness and gratitude. It is useless to try, and I will not try, to tell you how much I thank you for all your loving care of me; you gave me more happiness and rest than I could have thought now possible in this life. Our visit to Hawarden was certainly an event that we may all remember, and may sometimes make others happy by telling of. What a fascination there must be to some persons in the political life, that such a man as that could be tempted by it to leave all the happinesses of such a home as he has and knows how to enjoy.

Sept. 2nd.—I answer your letter to-day, and add to the happiness of a Wednesday afternoon in London without any meeting of the Vaccination Commission. But, as you may well suppose, I have no news and nothing to tell-of, unless that they take as much care of me as even you would, and provide more than comfort enough for me, and I eat and drink and sleep and rest and am as warm as can possibly be good for me. My children are really more than returning any care that I can have shown for them.

Dec. 1st.—That date reminds me of my father's birthday—the first of December 1774—a day always gladly and happily kept as long as he lived, and still gratefully remembered by his only surviving child. He was a thoroughly good man, a gentleman in his very nature, only too hopeful, and too generous even to his children.

Many many thanks to you for your loving letter, and for sending with it this which I now return. It is very amusing to see how renown in play now keeps pace with renown in work. In my time they would have been deemed opponent: now, to the advantage, on the whole, of both, they seem rather to be nearly equivalent. Certainly, as I think of the school-life of the three generations that I have known, it has been, in all respects, whether for study, or for healthiness, or morality,

or happiness, constantly becoming better. I ought to have written to you yesterday, but I am becoming an example of what I used to observe in others—how little men do except under compulsion, or something that they feel equivalent to it. I have now almost nothing to do, and I leave the 'almost' undone, even at the cost of good manners.

In September, he writes to Sir Henry Acland :—

I am, thank God, well, and may have been refreshed, in some measure, by my holiday. But I am growing very old, and, as I watch the changes that old age brings, I constantly feel sure that they are such as one should be thankful for—including as they do the consciousness that the 'time draweth near,' and that, in the short time that may remain, there is very little claim or need for the work that almost wholly occupied one's earlier days, and that one's mind is wholly unfit for the study of such subjects as used to be one's delight and seemed to be one's duty, and that thus and by various other means one is being taught how best to use the time thus mercifully granted and, as it were, divinely set apart and exactly fitted for its best use. I believe that we are agreeing in this thought and in many that issue from it.

He writes this year to Sir William Turner :—

Oct. 30th, 1896.—I enclose Messrs. Longman's account of the last year's sale of our Lectures on Surgical Pathology, and a cheque which may tell that the sale has nearly reached its 'vanishing point.' It might be amusing to know who can have wanted to buy a book on pathology nearly 50 years old. I hope you are quite well, and, with all around you, happy and prosperous. I often hear of your London son, and always with praise of him. *Dec. 26th.*—I was sorry but not surprised that I did not see you during the Meeting of the Medical Council: I am much less active than I used to be, and could not come at the right time to the office, and this house is much further off than the old one used to be. Very evidently, too, your work has been constant and heavy, and the whole work of the Council is constantly becoming more political. And the direct representation will not improve it, but will steadily diminish its influence on the advancement of science and all forms of useful knowledge. But—bah! I am growing old, and my judgment on political affairs may be as little fit for use as my thoughts on pathology fifty years ago would now be.

1897.

In April 1897, the Council of the College of Surgeons awarded him the Honorary Gold Medal of the College, the last and highest honour that they could give him. It was a year of things done for the last time—his last holiday, his last letters written before his hand got too weak. In March, he writes to his son at Oxford, that he cannot come to him:—

I am so rapidly growing older that I doubt whether I could safely bear the journey, and am quite unfit for any conversation or for 'seeing' any one. I study and watch myself as little as possible: but I can see that the progress of old age is altogether a 'very curious' subject, and needs the combination, which is impossible in one person, of the old subject with the young or middle-aged observer. Well—the result, so far as your invitation is concerned, is 'I cannot come.' Do not let me seem to be complaining. My progress in old age is really a great mercy—leaving no doubt that the end of this life is not far off, and that it is, thus far, 'free from pain,' and may, with God's guidance, be 'free from actual sin and shame.'

In August, he writes from Tan-yr-allt to one of his sons in London:—

I hope you are happy in what people love to call the dull season, though the dullness is usually only in their own minds (so, at least, I used to think when I had no holidays). The staying here has been as full of pleasure and of true happiness as was possible for me. Every one has been kind, quietly watching to see and provide everything that I could want. It would be hard to say whether the beauty outside the house, or the comfort and happiness within, has been the greater. I am very thankful for all—thankful to God and to all here.

He writes to Sir Henry Acland, having been asked to speak at a meeting at Oxford in support of medical missions:—

August 20th.—In my active life, I always felt that any good I might possibly have done in such cases was more than balanced by the possible and probable mischief of advertising myself, and of thus encouraging younger and less successful men to do the same. I should still hold to this: but then I used to think

that, when no longer in active work, I might be able to write or to speak publicly of serious things and others that might usefully be told without any advantage to myself. And so I should think now: but I did not reckon on what I now find, that I am only fit for complete retirement and such thinking as, by God's mercy, I may be enabled to use wisely so long as this power is granted to me. *Sept. 3rd.*—It is well that very few should now think me fit for consultation: they are quite right. It may be enough to strive, in vain, to understand anything of the real progress of medical knowledge, whether in science or in practice, and to be more than content that one cannot keep pace with it or be tempted to use it among the sick.

In November, he writes to him concerning the Royal British Nurses' Association:—

I am glad that something has brought me the pleasure of a letter from you—the only pleasure I have to thank that Association for. I had the same papers sent to me, and had decided that the best plan for me was to send no answer. Your letter, implying the same wish in your mind, makes me sure that we are both of us right. I have never taken any share in the business of the Association; and have been strictly a Vice-President; and have not studied any of the reasons of the dispute or been near any of the meetings about it. It is too feminine for me, and I have always pleaded that I was trying to do a fair share of such work in the Queen Victoria's Jubilee Institute. I am, thank God, very well—only very old; but this with no pain and with only such signs of warning as I may be very thankful for. I wish you may find some safe and happy reason for coming to London. Then I may see you: for I can hardly hope in winter weather to come to Oxford. Good-bye, dear Acland, God be with you.

A few weeks later, he writes to him for the last time:—

I wish I could hope to see you soon: but I fear this cannot be in Oxford. My infirmities increase so rapidly that I cannot hope to travel so far, in weather so nearly cold as we must have in winter. They increase, thank God, without pain, but not without evidence or warning. And I try to use their warnings rightly, using especially what you gave me last year —Dr. Pusey's book of prayers edited by Dr. Liddon, and good

Bishop Andrewes' Meditations. I could have, I think, no better human guidance. May God bless them and guide me to their just use—adding this to His many mercies.

This is the last of all the letters. It makes a place here for the following account of his constant study of theology, written by his son the Bishop of Oxford:—

'No trait in the tenor of my father's life was more constant and characteristic than his use of Sunday. So far as he rightly could, he kept the day from the encroachment of ordinary work. He did what had to be done: but he never lightened the burden of a week-day by deferring any of its demands till Sunday. There was a peculiar look of reluctance in the way he went to see a visitor who had come on that day when he might as well have come on another: and the visit was generally short. I remember asking him when I was an undergraduate whether I might on Sunday go on reading for the Schools: I do not remember all his answer: but it was decisively negative; partly on the ground that a man was almost sure to break down if he would not rest one day in the week. And he used religiously the rest he so secured. He never dined out, never travelled for pleasure's sake, never read a newspaper or a novel on Sunday, never let any weariness stop his Church-going.

'In the inscription beneath the window commemorating in St. Nicholas' at Yarmouth his father and mother, he wrote of them as "lovers of their Church and home": and to that two-fold love, ever-present in his life, he dedicated the time he won from work on Sundays. Our earliest recollections are of the walk with him between breakfast and the morning service: in Cavendish Square when we were quite little, and later on in St. James's Park to hear the Guards' Band. He kept up the old fashion of dining early that day: and after dinner he always walked to the Hospital, taking one or two of us, as we grew somewhat older, with him; and at the Hospital we either waited for him in the Sister's room, or walked about in the Square which is the pride of St. Bartholomew's; or, as we grew older, went round some of the wards with him, with the chance of learning patience from his patients and pity and gentleness and decision from him. He would try to manage his other visits so as to get to an afternoon service somewhere:

when Dr. Liddon was preaching at St. Paul's he was often there: or he would go to the service at the House of Charity that he had helped to found: and until he was forced to be careful about the risk of cold he often went to an evening service. The happy lack of a Sunday post saved him from that toil of letter-writing which claimed all the late hours of other days. And the friends, mostly of a younger generation, who were welcomed to share the quiet brightness of the evening, the talk and music, the fun of the informal supper-party, came in late enough, and felt themselves enough at home, to leave him space for reading. And so he got his time for the study of theology: and he made the very most of it. There too the rare strength and resoluteness of his mind came out. For no book seemed too stiff for him, if only it was thorough and well thought out and sincere. Pascal and Hooker he had studied thoroughly in early days: at one time he set himself to master Berkeley and Cudworth: he read much of Pusey, and Newman, and Liddon, and Lightfoot, and Westcott: and everything that Church and Mozley wrote. The place which Mozley held in his mind appears in the Address he gave at the Leeds Clergy School on Theology and Science. The theme is one of which people have become for a while somewhat impatient: though it may be doubted whether impatience can be a man's real or lasting attitude towards a task which, in one way or another, is set afresh in every generation to most of those who think. But whatever may be felt about the title or theme of the Address, it will hold its own, I think, as a lesson in the art of thinking and in the temper that helps men to think rightly. And again and again as one reads it one is reminded of Mozley: not only by express quotation but by the general habit of mind which is evinced, and even by a little blending of audacity with strict self-restraint in the style of writing.

'But of all authors Butler told, perhaps, most deeply on him. A few months before he died, when his bodily strength had greatly failed, and his sight was failing, I chanced to tell him I had been reading the Analogy again. "So have I," he said: and, speaking then with difficulty, scarcely above a whisper, he summed up with masterly justice what he thought of the book, and where

it seemed to him to fall short of what is needed now for the defence and confirmation of the faith. That was more than sixty years after he had written of Pascal the words which have been already quoted in this Memoir: and through all those years he had kept up, in such time as he could win for it out of the stress of practice and correspondence, the habit of theological reading. That habit told deeply on his mind. It kept his religion intellectually abreast of his science. Religion was not to him a field in which the intellect might stand at ease while the emotions went through their evolutions or conflicts: though no height stood barred to the simple and scantily taught, still he knew that the appeal, the demand was for the whole man: it was a field in which Pascal and Butler had needed and exerted all their powers: and one element in his dislike of certain forms of "musical service" was that he judged them to be addressed chiefly to the senses, not the intellect. He never had any inclination to think that "the way to be ripe in faith" was "to be raw in wit and judgment."

'And his theological reading, with the experience of life, and with those deeper forces which he constantly welcomed and revered, gave, I think, more and more distinctness and certainty to his religious convictions. I can recall no sign that he ever faltered from the position of the English Church. But the ground on which he took the side of faith some 35 years ago, when some one in conversation with him had assailed it, was, I think, less adequate, less positive than that on which he stood in later life, even a few years later. The difference may have been an apparent rather than a real difference: but it appeared like the difference between, on the one hand, Bishop Butler, in his most closely guarded attitude of apology, in that attitude which led Mr. Leslie Stephen to ascribe to him "a strangely cautious understanding," and, on the other hand, Dr. Mozley or Dean Church. The position was the same; but it was held, so to speak, with a garrison more certain of its own adequacy, and with a corresponding gain of ease and freedom.

'And with his habitual study of theology went, in a like tendency, two deeper habits, of which it would not be well to say much: the habit of reverence, and the habit of devotion. As the thought of what he was in

these ways rises in one's mind, it brings the picture of a grace and beauty of which one longs to speak: but even a little knowledge of what he felt about it makes one sure that it is better to be silent: and words seem coarse and blundering when they touch it. The outward tokens of his constant reverence one can recall. For all that seemed to betray irreverence in others jarred sharply on him: a noisy, self-asserting choir, or a fussy beadle, tried his tolerance: and if a clergyman gabbled or curtailed the prayers he would wonder whether there were no five minutes in the day that the man used worse than he might have used them in saying the service as it should be said. I never heard him tell a story or a joke that came near making fun of sacred words: he used to say that when one was ill, and thoughts were hard to keep in order, the stupid jest would hang about the words and rob them of their power. But all his strictness and carefulness in these ways was but the partial expression of a trait that was wrought into his heart and mind: a trait that gave a quiet and natural sanctity to all his thinking about great things. Of such a trait one cannot rightly speak: and still less do words seem just or becoming as one thinks of that yet deeper life which, more than any other power, made him what he was:—through all his years of vigour and of failing strength and extreme weakness, unfailing in steadfastness and tranquillity and independence. Only those who were nearest to him could even guess at the intensity and simplicity of that inner life.'

1898–1899.

In March 1898, he could no longer do without the help of a nurse; and from this time onward Nurse Finn gave him most skilful attendance. This same month, he resigned his last hold on work, his place on the Board of the Clerical, Medical, and General Life Assurance Society: he had been a Director for 34 years, and a Deputy-Chairman for 6 years during the Chairmanship of his friend Sir John Mowbray. But he still kept his connection with the administration of the great Benevolent Societies of his profession. He was a Life-Governor of Epsom College, and had been Chairman at one of the Festival Dinners of the College; and, up to the time of

his death, he was President of the British Medical Benevolent Fund, and President of the Society for the Relief of Widows and Orphans of Medical Men.

This date, March 1898, seems to divide his life at Park Square West into two well-marked periods. So long as he could, he fought his infirmities, compelling himself to be independent of help over trivial things, seeing the one or two patients who still came to him, and in every way keeping as close as he could to the vanishing duties and habits of his active life: he made silent rules against his own comfort, and would not wear slippers in the evening, or give up dressing for dinner, or take any meal in his own room: and he was careful to be occupied each day with work, or with affairs that had at least the feeling of work about them; and would seldom ask for help, and would often evade the offer of it. Those who were about him remember the anxieties of this period, the horrible risk of his falling, in the house or in the street, and their inability to be of more service to him, or to make him more comfortable: they remember, also, the wonder of it, his everlasting gentleness and graciousness and patience: innumerable acts of charity, done without much previous enquiry: letters written only that he might send his love: and incessant thought for others. He seemed never to be thinking of his own wants, and always making complex little plans for the happiness or convenience of somebody else—for so-and-so to use the carriage, or to stop the night, or to have dinner on his way through London. He fought his old age, from 1893 to 1898, as though it were a part of his work, most of it rather dull, some of it interesting, some of it almost amusing; and he never once spoke with discontent of the interminable length of the fight. It is literally true, that he did not say one hard word about it, from the first beginning of his old age to the end of it.

After March 1898, it was no longer a fight, but a siege: he surrendered everything except life itself; he had, at last, his time of 'retirement.' Of these last two years of his life, those who were with him can only say that every day, and all day long, it was the same miracle. He became unable to speak above a whisper, or to move about his room, or to stand alone: later, he had difficulty

in taking food, and in making himself understood, and other troubles. He seemed almost indifferent to these distresses: he could even laugh at them. He would say of this or that infirmity that it was 'curious' or 'troublesome,' and so would dismiss it: or he would describe some burden, that was especially hard to bear, in such words as people use for the most trifling ailments: or, sometimes but very seldom, a shade of vexation would cross his face for a moment, and no more. He took the whole load of utter helplessness, or seemed to take it, as though it weighed nothing.

And this acceptance of inaction was only a small part of the wonder of his final old age. It was even more wonderful, to see his steady enjoyment of such pleasure as was still possible for him. Music never failed him; and, every evening, his bedroom was made a sort of common-room, after the old rule of 'keeping all together,' and for two hours there was music, and the semblance of the evenings at Harewood Place, and always a welcome from him, which became at last hardly more than the lifting up of his hand. One was free to say 'anything' to him: even very light talk, that would once have bored him, now amused him. Among his daughter's friends are some who well remember those evenings, the good chamber-music, the spirit of comedy in the talk made to please him, and his quiet observant air as he sat listening or laughing. The picture is of him white-haired and white-bearded, in his dressing-gown, with a wrap over his knees, in his big arm-chair: and, close to him, a little table with his books of devotion, flowers, his watch, and his glass of wine. 'One song more,' he would say; and, when he was in bed, he liked to have music played to him till he was asleep.

He took pleasure also in a long drive, every morning or afternoon, with his daughter and his nurse; though he was so helpless that he had to be lifted on a carrying-chair into his carriage. There must always be a plan; some far-off call to be made, or some out-of-the-way sight of London to be shown to a visitor: it became difficult to find a purpose for every day, but he loved to be doing a kindness to somebody; and, if some of the things that 'had to be done' were plainly not so urgent as they were said to be, still he took his part in the pretence of urgency

with perfect gravity. His nurse has written of these daily drives, 'They were a source of great pleasure to him, and we often extended them to a long distance. He watched with the keenest interest everything that we passed, and often pointed out special buildings and places. He greatly loved driving in the City, and would ask to go past St. Bartholomew's, that he might see the Hospital, and his own old rooms in Little Britain. Before starting, he invariably enquired if anyone wanted to be taken anywhere, and I am sure the drive was much more enjoyed by him if he could help anyone. We sometimes took a hand-camera with us, and I well remember how he insisted on going even a third time to Greenwich, to let me take a snapshot of the Observatory, because he thought I was disappointed at having failed twice.' In the summer, he would drive to Dulwich or Kew or Richmond: in the winter, he made great rounds in London. It is strange, seeing how he hated loud noises all his life, that he chose rather than avoided the noisiest and most crowded streets. Probably, self-discipline still helped to decide this choice: but he kept, also, his old love of sight-seeing, and could be 'amused by all the variety of shops and scenery' in the City. He preferred Whitechapel, or the Tower Bridge, or the Surrey side of the river, to the Parks; a reason for going this way and not that, something to be seen or done, not a purposeless airing round and round Hyde Park with other unoccupied people, who would look at him and say that he was 'sadly changed.' His long white beard, and soft hat and heavy cloak, made so great a change in him that once, when he was sitting in his carriage outside the Turner collection at the Guildhall, a man came up and asked whether he had the honour of addressing Mr Ruskin.

Even in the utmost bodily infirmity, he maintained singular clearness of mind. To the time of his death, he was free from the least shadow of childishness, fairly accurate in his memory of names and of faces, careful, definite; and all this, as it seemed, not so much from nature and habit, but more from the unceasing quiet exercise of his will not to be vague or forgetful. He remembered everybody; but he had to give up seeing his friends, because he could not speak above a whisper. In May 1898, their Royal Highnesses the Prince and Princess

of Wales kindly visited him: and in April 1899, on a special occasion, he had the happiness of seeing once more many of his friends—Lord Lister, Sir William Priestley, Sir Samuel Wilks, Sir Henry Thompson, Sir Hermann Weber, and many more. Except for these times, he saw only one or two friends who had long been part of his home-life. It cost him something, to loose his hold on friendship. He had left off, at last, all general reading: and, though he still turned the pages of the Comptes Rendus of the Académie des Sciences, and the Bulletins of the Royal Society of Belgium, he read only the New Testament and his books of devotion. These, for the last two years of his life, were always in his hands or by his side. He did not much care to have books or papers read to him: and, for most of the day, he sat looking over the Square Gardens, with one of his three or four books open in front of him.

But, though one wrote for ever, one could not describe the wonder of these last years of his life. One looks back at the infinite fulness and energy and strong will of his whole life: at his devotion to science, at his laborious practice, his hospitalities, his holidays, his keen love of art and of friendship: and it is impossible to measure the height to which, through eighty years, he rose, that he might attain the consummate triumph of his final old age away from the world.

In his Memoirs, he says of his father, 'In the time of his natural decay, nothing erred from its just proportion in the work of life; only there gradually became less of everything belonging to this life; and in due time everything slowly and coincidently ceased.' And of his mother, 'Speechless as she was, shrunken, bent-down and withered from her former graces, she was gentle, and social, and with simple gestures took part in family affairs, and helped to make the home still often happy.' It is, in some ways, like a forecast of his own end.

His last holiday was in 1897, at Tan-yr-allt: he did not leave London in 1898 or 1899, and bore the hot weather well. From March 1898, when he gave up the fight against old age, he slowly lost what strength he still had; but so slowly that it was hard to see the change. To the very last, he used to be up and dressed

by eight o'clock; and on one morning every week he was up at half-past six, that his son the Vicar of St. Pancras might give him the Holy Communion in his room. He spent the greater part of the day downstairs. Always, when he lay on his couch or went to bed, he slept at once; he had always had this power of immediate sleep. In the autumn of 1899, his feebleness increased; especially, he had difficulty in taking food, and had lost the use of his right hand. On Christmas Day, 1899, he was able to be driven to the house of one of his sons; there was a Christmas-tree, and a little prologue spoken in his honour by two of his grandchildren. Next day, he was slightly feverish in the evening; and on the 27th he kept his bed: there were signs of congestion of the lungs. He said nothing about himself, and did not try to talk to those who were with him. He had no pain, or even discomfort. In his last hours of consciousness, he received the Holy Communion at the hands of his son the Bishop of Oxford: on the 29th he became unconscious, and died on the night of Saturday, Dec. 30th, 1899. The first part of his funeral-service was in Westminster Abbey: he had borne the pall there for Tennyson, and for Browning: now he came back, after his long retirement, once more among the members of his own profession. A great crowd of mourners was in the choir and the transepts of the Abbey: and, last of all, many students from St. Thomas' Hospital came across Westminster Bridge, and were standing bareheaded as he passed them. He and his wife are buried side by side in the Cemetery at Finchley: they were happy in the opportune time of their death, that they did not live to see death break the innermost circle of those who loved them.

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